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INTERNATIONAL SOYBEAN VARIETY EXPERIMENT

SECOND REPORT OF RESULTS

D.K. Whigham



International Soybean Program

INTSOY

International Agricultural Publications
INTSOY Series Number 11

COLLEGE OF AGRICULTURE
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

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Second Report of Results

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INTSOY Series Number 11

December 1976

Single copies of this publication may be obtained by writing to INTSOY at the following address:

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Cable address: INTSOY

Library of Congress Catalog Card Number 76-40710

Support for the research reported and the preparation of this publication was provided by the United States Agency for International Development under Contract No. AID/cm/ta-c-73-19 and Contract No. AID/ta/c/1294, and by the College of Agriculture, University of Illinois at Urbana-Champaign.

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FOREWORD

This publication is part of a continuing effort by the International Soybean Program (INTSOY) of the University of Illinois at Urbana-Champaign and the University of Puerto Rico, Mayaguez Campus, to disseminate information about soybean research in developing nations. INTSOY is cooperating with international and national organizations to expand the use of soybeans for human food.

The International Soybean Variety Evaluation Experiment (ISVEX) was organized to evaluate existing soybean cultivars to determine their adaptability to environments where they had not previously been cultivated. This is the second of a series of publications to report the results of ISVEX.

Requests for ISVEX were initiated by researchers desiring to evaluate soybean cultivars in their environments. INTSOY recognizes that the success of this cooperative experiment was due to the efforts of the cooperators. We gratefully acknowledge the input of each cooperator and host organization.

The objectives of the experiment are being achieved. We know much more about the adaptation of soybeans in various environments than ever before, and INTSOY is being used extensively as a resource base. Soybean cultivars from many countries are now being used in the INTSOY breeding program to help develop material better adapted to tropical environments. Many national programs now utilize cultivars introduced by ISVEX. A new Soybean Preliminary Observation Trial (SPOT) has been established at a few sites to evaluate exotic material and breeding lines. Promising material or lines will be used in future ISVEX's.

INTSOY expresses its appreciation to the U.S. Agency for International Development for financial and other support of the work reported in this publication. We gratefully appreciate the assistance of the Statistical Laboratory of the Department of Agronomy at the University of Illinois at Urbana-Champaign for the development of computer programs and the use of other services. Thanks go to the Food and Agriculture Organization of the United Nations for assistance in conducting the experiments in several countries. Many national and international organizations supported the international transportation of seed and materials to selected countries, and their assistance is also appreciated.

WILLIAM N. THOMPSON
Director
International Soybean Program (INTSOY)

INTERNATIONAL SOYBEAN VARIETY EXPERIMENT

Second Report of Results

This is the second report of results from the International Soybean Variety Evaluation Experiment (ISVEX), organized in 1973 by the International Soybean Program (INTSOY) at the University of Illinois, under a contract with the Agency for International Development, U. S. Department of State. ISVEX was designed to meet the following objectives: (1) to test the adaptation of soybean varieties (cultivars) under a wide range of environmental conditions; (2) to provide research workers with an opportunity to compare local and introduced varieties; (3) to provide a source of new germplasm, which the cooperator may use directly or incorporate into his breeding program; (4) to identify areas of the world that have a potential for soybean production; and (5) to evaluate the response of the soybean to different environments.

MATERIALS AND METHODS

Procedures

Seed for planting was provided to each cooperator in individual row packages. Fresh inoculant was provided for treatment of the seed prior to planting. Instructions for management and data collection were sent with the seed shipment to each experiment site. The experiment was designed as a randomized complete block with four replications. Each plot consisted of four rows 5 m long and 60 m apart. The two center rows were harvested for yield data.

Cultivars

The 15 soybean cultivars tested in the second ISVEX during 1974 and 1975 are listed in Table 1. The entries were selected from U.S. cultivars in order to provide access to adequate quantities of seed. Certified or foundation seed was purchased from sources in the area of the United States where each variety was grown. The cultivars were selected for their consistent high-yield performance for several years in the U.S. Department of Agriculture Regional Soybean Trials originating in Urbana, Illinois, and Stoneville, Mississippi. At least one cultivar from each of maturity groups III through IX was selected. Twelve cultivars were retained from the first ISVEX,* and three new cultivars were added. The new entries were Bossier, Forrest, and Tracy.

Some cooperators substituted local cultivars for one or two of the entries provided. At a few sites additional entries were included by placing them at the end of the replications.

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* Whigham, D. K., "International Soybean Variety Experiment - First report of Results," *INTSOY Series Number 8*, University of Illinois at Urbana-Champaign, 1975, 161 p.

Experiment Sites

The experiment sites were divided into environmental zones of 10° latitude and 500 m altitude to identify limits of the environmental range. There was considerable variation within each zone for temperature, moisture, and radiation. The limits of the zones and number of sites in each are shown in Table 2.

Environment dictated the optimum planting time for each site, and plantings were made throughout the year. Several sites tested the experiment during more than one season of the year.

The second ISVEX was requested by 136 sites in 60 countries. Useful data were returned from 86 sites in 39 countries (Table 3). Figure 1 shows the locations of the 39 countries. The experiment was tested under a wide range of environmental conditions represented by the range in latitude of 27° S in Swaziland to 40° N in Spain and by altitudes from below sea level in Guyana to 1,850 m in Ethiopia. However, 58 sites were located within 20° of the equator and at less than 500 m altitude.

A complete list of cooperators and their addresses is included in Table 4.

Data Collected

Data were reported for each plot by cooperators as follows:

Yield: Weight in grams of clean grain from 5 m of each of the two center rows.

Days to Flower: Days from date of emergence to date when 50 percent of the plants have flowers.

Days to Maturity: Days from date of emergence to date when 95 percent of the pods are ripe.

Nodule Number: Number of nodules on a root at the time of flowering and three weeks thereafter.

Nodule Dry Weight: Dry weight in grams of the nodules associated with a root at flowering and three weeks thereafter.

Plant Height at Maturity: Height in centimeters from the ground to the top of the main stem at maturity.

Lodging Score: Estimated rating of lodged or down plants on a scale of 1 (all erect) to 5 (all down) at maturity.

Shattering Score: Estimated rating of shattering or loss of seed from the pod on a scale of 1 (none) to 5 (over 50 percent) at maturity.

Plants Harvested: Total number of plants harvested from the two center rows of each plot.

Pods per Plant: Average number of pods per plant.

Seed Weight: Weight in grams of 100 randomly selected seeds.

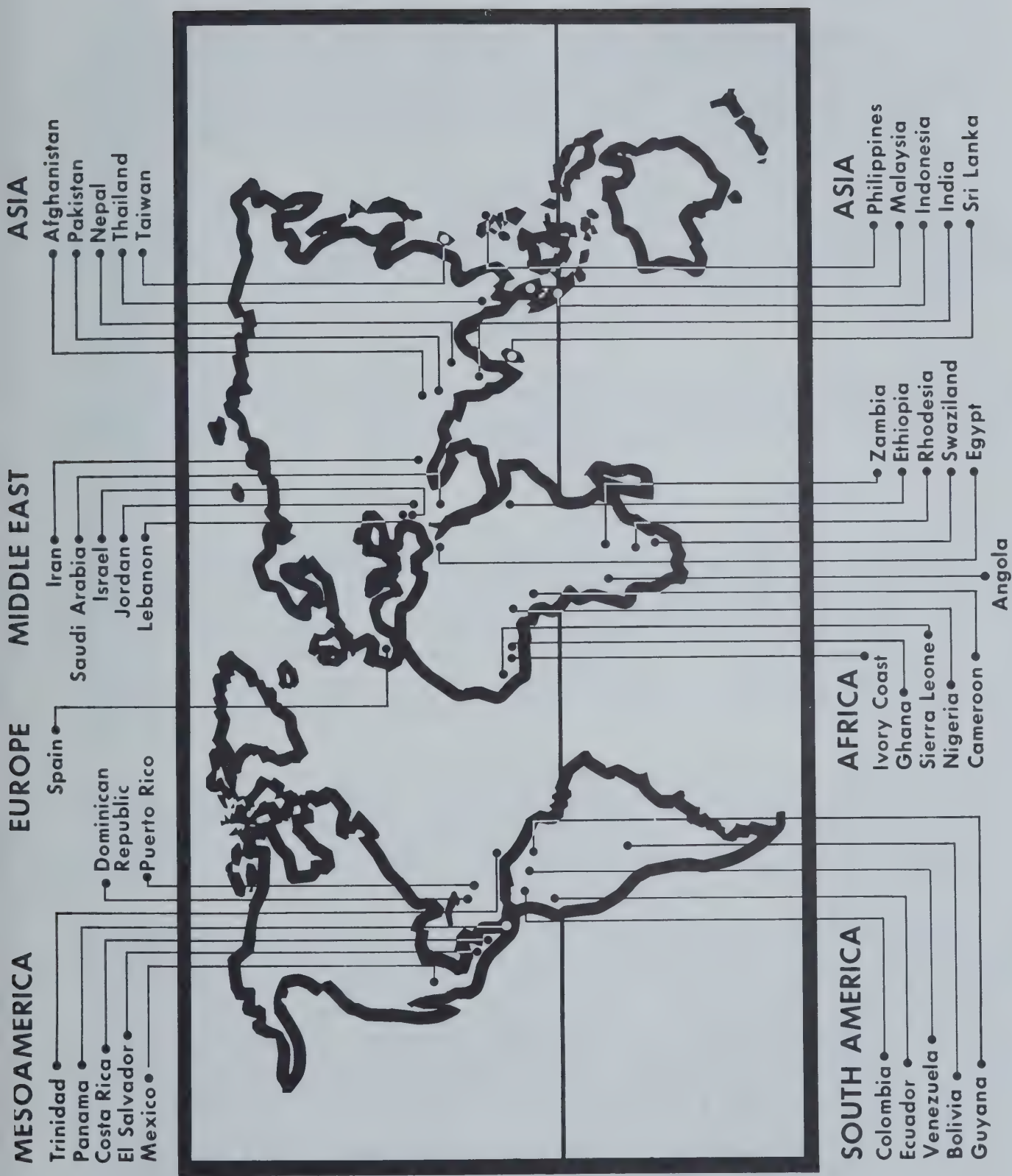


Figure 1. Countries from which data were collected in the second International Soybean Variety Evaluation Experiment

Quality of Seed: Estimated rating of seed quality after harvest considering the amount of wrinkling, growth cracks, greenishness, and moldy seed on a scale of 1 (very good) to 5 (very poor).

Analyses of variance were completed for variables for which data were reported from more than one replication at each site during the same season. Means, standard error of a cultivar mean, coefficient of variation, and the least significant difference (LSD) of cultivar means at the 5 percent level are reported for analyzable variables from each experiment site. Correlation coefficients were computed between all traits reported.

Protein and oil contents were determined on the dry weight basis by a near-infrared light reflectance instrument in the Department of Agronomy at the University of Illinois. The analyses were made from composite seed samples of cultivars tested at each site and returned to INTSOY for analysis.

RESULTS AND DISCUSSION

Summary and two-year means are presented in Tables 5 through 23. Results from individual sites of the second ISVEX are reported in Tables 24 through 109. These tables include general information about each site in addition to agronomic and seed composition values. The tables are arranged by region, country, and site.

Yield

Zone I included 37 sites located at less than 500 m altitude and between the equator and 10° latitude. The mean yield for zone I was 2,264 kg/ha (Table 5). This was an increase of 510 kg/ha over the mean reported in the first ISVEX for the same zone.* Means for individual sites in the second ISVEX ranged from 309 kg/ha at Bandirippuwa, Sri Lanka, to 4,332 kg/ha at Kilinochchi, Sri Lanka. Mean yields between 2,000 and 3,000 kg/ha were reported from 14 sites, and three sites reported a mean yield of greater than 3,000 kg/ha. Local cultivars produced the highest yield at six sites.

Cultivar mean yields for zone I ranged from 1,753 kg/ha for Tracy to 2,635 kg/ha for Bossier. Only those sites with a coefficient of variation less than 30 were included. The cultivars Jupiter, Davis, and Improved Pelican were also high yielding in zone I. The mean rank of cultivars for high yield within each zone is summarized in Table 6. Davis, Bossier, Improved Pelican, and Jupiter rank first, second, third, and fourth, respectively, for all sites in zone I.

The combined analyses of data from all zone I sites in Africa, Asia, and South America are presented in Tables 16, 17, and 18, respectively. The mean yield for the six sites in Africa was 1,325 kg/ha. Bossier produced the highest yield, 1,782 kg/ha, followed by Improved Pelican, Davis, and Hardee. In Asia the mean yield for 19 sites was 1,862 kg/ha. Davis was the highest yielding with 2,138 kg/ha, followed by Bossier, Hardee, and Improved Pelican. The South American sites produced the highest mean yield of the regions with 2,435 kg/ha for eight sites. The highest mean yield was 3,359 kg/ha, produced by Jupiter. The cultivars

* Whigham, D. K., "International Soybean Variety Experiment - First Report of Results," *INTSOY Series Number 8*, University of Illinois at Urbana-Champaign, 1975, 161 p.

Bossier, Improved Pelican, and Davis also produced high yields in South America and were among the four highest yielding cultivars in all three regions of zone I.

Table 7 summarizes the mean values for agronomic characteristics of the seven common cultivars when the first and second ISVEX's were combined. The combined mean yield of 2,234 kg/ha for Davis was the highest. Williams, Bragg, Jupiter, and Hampton 266A produced mean yields of more than 2,000 kg/ha. Cultivars not included in Table 7 did not have complete data for all sites both years.

Zone IV included 21 sites located at the same altitude as that in zone I but between 11° and 21° latitude. The mean yield for all zone IV sites was 2,001 kg/ha (Table 5), an increase of 352 kg/ha from that reported in the first ISVEX for the same zone. The range in means for individual sites was from 553 kg/ha to 3,369 kg/ha for Chiang Mai, Thailand, and Abapo-Izozog, Bolivia, respectively. Nine sites reported mean yields of more than 2,000 kg/ha. A local cultivar produced the highest yield at only one site.

The range in cultivar mean yields for zone IV was from 1,613 kg/ha to 2,362 kg/ha for Tracy and Jupiter, respectively. Bossier, Davis, and Improved Pelican also produced high yields. Table 6 shows that Jupiter is the most consistently high yielding cultivar, followed by Bossier, Improved Pelican, and Davis for the zone.

Table 19 shows the combined analysis of data from the five zone IV sites in South America, which were all located in Bolivia. A mean yield of 2,234 kg/ha was reported. The highest cultivar mean was 2,996 kg/ha for Jupiter, followed by Bossier, Davis, and Improved Pelican. Data from the combined sites of zone IV in Mesoamerica are reported in Table 20. The mean yield for 13 sites was 2,181 kg/ha. Bossier produced a mean yield of 2,425 kg/ha, followed by Jupiter, Davis, and Williams.

Two-year mean values for zone IV are shown in Table 8. Hardee had the highest yield with 1,988 kg/ha. Jupiter and Davis were second and third highest yielding, respectively.

The mean yield from zone VII was 1,250 kg/ha (Table 5), or 180 kg/ha less than that reported from the first ISVEX. Mean yields for individual sites in the second ISVEX ranged from 254 kg/ha at Shanhua, Taiwan, to 2,294 kg/ha at Pantnagar, India. A local entry produced the highest yield at one of the six sites.

The range in cultivar mean yields for zone VII was from 963 kg/ha to 1,700 kg/ha for Bonus and Bossier, respectively. Bossier had the highest mean rank for high yield at all sites in zone VII, followed by Tracy, Improved Pelican, Hardee, and Williams (Table 6).

The combined values of agronomic characteristics are shown in Table 9. Complete data from all sites were available for only five cultivars. Williams produced the highest yield of 1,346 kg/ha. Davis and Clark 63 were the second and third highest yielding, respectively.

Yield was highest at latitudes closest to the equator when the altitudes were less than 500 m. Both zones I and IV had higher mean yields in the second ISVEX than in the first ISVEX. However, the highest mean yield for zone VII was produced in

the first ISVEX. Improved crop management (more experience) by the cooperators and fewer poorly adapted cultivars resulted in yield increases for zones I and IV.

Days To Flower

The mean days to first flower for zones I, IV, and VII are shown in Table 10. In zone I the mean was 30 days, and the range among cultivars was from 26 days to 37 days for Bonus and Jupiter, respectively. The earliest flowering was at Angunukolapalessa, Sri Lanka, with a mean of 24 days (October 24 planting date). The latest flowering occurred at Serdang, Malaysia, with a mean of 36 days (October 11 planting date). The two-year mean number of days to flower was the same as that of the second ISVEX (Table 7). The range in cultivar mean values was from 28 days for Clark 63 and Williams to 37 days for Jupiter. Fewer cultivars were included in the two-year mean than in the second ISVEX mean.

The mean number of days to flower in zone IV was 35. Bonus was the earliest to flower and Jupiter was the latest, with 27 and 41 days to flower, respectively. The mean number of days to flower was 26 days at Port of Spain, Trinidad and Tobago, when cultivars were planted on December 3. With a December 30 planting date, cultivars at Mayaguez, Puerto Rico, required 53 days to flower. The mean number of days to flower was 36 when both years were combined (Table 8). The range in number of days to flower was from 31 days for Clark 63 and Williams to 42 days for Jupiter. Clark 63 and Williams represent the earliest maturity groups (IV and III) in the trial, and Jupiter is the only representative of maturity group IX, the latest in the trial.

Zone VII represents environments with a range in latitude from 21° to 31° and with altitudes less than 500 m. Sites in zone VII were planted between May and September. All sites were in the northern hemisphere. The mean days to flower was 42, and the range among cultivars was from 28 to 58 days to flower for Bonus and Improved Pelican, respectively. Shanhua, Taiwan, had the earliest flowering (28 days), and Seds, Egypt, had the latest flowering (57 days). The mean number of days to flower when both years were combined was 35 (Table 9). Bonus had the fewest days to flower (29 days), and Hill required the most days to flower (42 days) among the five entries with complete data.

The number of days required before flowering increased with an increase in latitude. All cultivars, except Williams, required more days to flower as latitude increased. Williams flowered one day earlier in zone VII (21° to 31° latitude) than in zone IV (11° to 21° latitude).

Days To Maturity

The range in mean number of days to maturity was from 85 for Tracy to 109 for Jupiter in zone I (Table 11). The mean for all entries was 93 days to mature. When the cultivars were planted in November at Ratmalagara, Sri Lanka, they required only 74 days to mature. At Tocumen, Panama, the trial was planted in September and required a mean of 125 days to mature. The two-year mean for days to mature in zone I was 92. The range among cultivars was from 87 for Hill and Williams to 106 for Jupiter (Table 7).

In zone IV the mean days to maturity was 99. The cultivar Bonus was the earliest to mature with a mean of 88 days. The latest maturing cultivar was Jupiter, which had a mean of 118 days. Wadi Jizan, Saudi Arabia, had the fewest mean number

of days to maturity with 81 (November planting date). The latest site was Santiago, Dominican Republic, with a mean value of 119 days to maturity (April planting date). The two-year mean for days to maturity was 101. Clark 63 and Williams required only 92 days to mature as a mean of both years, and Jupiter required 117 days.

The range in days to maturity among cultivars in zone VII was from 90 days for Williams to 123 days for Jupiter. The mean of all entries was 107 days to maturity. The site with the fewest mean days to mature was Shanhua, Taiwan, with 81 days when trials were planted in September. Seds, Egypt, had the most days to maturity, with 128 days when planted in May. The mean number of days to mature for two years was 98. The cultivars ranged in days to mature from 92 to 108 for Bonus and Davis, respectively.

The days to maturity increased for all cultivars when grown at sites between the equator and 31° latitude when altitudes were less than 500 m above sea level. For the mean of both years, the number of days to maturity increased from zone I to zone IV, but decreased in zone VII.

Nodule Number and Dry Weight

Nodule measurements were taken to determine the survival of *Rhizobium japonicum* in different soil environments and to estimate the availability of nitrogen for plant growth. Inoculant was provided with each trial. Measurements were made at the time of first flowering and again three weeks later. Because of the labor required to make the measurements, these data were the ones most frequently missing.

Nodule number and dry weight increased from the first to the second date of measurement in all zonal and regional comparisons (Tables 16 through 23). Zone IV had the highest nodule number and dry weight. The zone IV sites in Bolivia reported the highest number of nodules, but the zone I sites in Africa reported the highest nodule dry weight.

Plant Height and Lodging

Plant height ranged from 23 cm at Abidjan, Ivory Coast, to 71 cm at Taboga, Costa Rica, with an overall mean of 44 cm in zone I. The tallest cultivar was Improved Pelican at 70 cm (Table 12), and the shortest were Hampton 266A and Tracy at 32 cm. The two-year mean plant height was 42 cm, with a range from 32 cm for Hampton 266A to 66 cm for Jupiter as shown in Table 7.

In zone IV the mean plant height was 45 cm. The tallest cultivar was Improved Pelican (77 cm), and the shortest was Tracy (32 cm). Khon Kaen, Thailand, had the lowest mean plant height (19 cm), and Abapo-Izozog, Bolivia, reported the highest mean (68 cm). The mean plant height for two years was 45 cm. The range as shown in Table 8 was from 34 cm for Hampton 266A to 71 cm for Improved Pelican.

The mean plant height for zone VII was 65 cm. Hill was the shortest cultivar at 51 cm, and Improved Pelican was the tallest cultivar at 97 cm (Table 12). The shortest mean plant height for any site in zone VII was 32 cm at Shanhua, Taiwan, and the site with the tallest plants was Seds, Egypt, with a mean of 96 cm. The two-year mean for plant height was 51 cm, and the range was from 48 cm for Bonus and Williams to 56 cm for Clark 63 (Table 9).

Plant height increased as latitude increased, with the greatest change occurring between zones IV and VII. All cultivars increased in plant height when grown in zone VII compared with the other two zones at lower latitudes. The longer growing period in zone VII permitted more plant growth. Improved Pelican was the tallest cultivar in all zones.

Tables 21 and 22 indicate a highly significant positive correlation between plant height and lodging. Tables 7 and 8 also indicate that the tall cultivars lodge more frequently than those of short stature. An insufficient number of sites recorded lodging scores for comparison in zone VII. Lodging did not appear to be a serious problem at any of the sites.

Shattering

The loss of seed from the pod prior to harvest was not a serious problem in this experiment. Harvesting at an optimum time was very important in reducing the shattering problem.

Plants Harvested

Plant stand establishment and survival was measured by counting the plants harvested. The desired plant population was 200 plants per harvest plot, or an equivalent of 333,333 plants/ha. Plots were overseeded to compensate for the variation in seed germination, but thinning was not recommended. For that reason, the percentage of the desired stand obtained ranged from below to above 100 percent at individual sites. Some cultivars were less tolerant of shipment and storage conditions prior to planting, with the result that poor stands were established for these cultivars at certain sites.

Zone I had the highest number of plants harvested, which was 92 percent of the desired population. The number of plants harvested decreased as latitude increased, with only 64 percent of the desired population obtained in zone VII. Within regions, the zone I sites in Africa harvested only 55 percent of the desired stand. However, the zone I sites in Asia harvested 92 percent of the desired stand (Tables 16 through 23).

Pods per Plant

The mean number of pods per plant for zone I was 28 (Table 13). The cultivars Tracy and Williams had the fewest number of pods with 22. Improved Pelican and Jupiter each had 38 pods per plant for the highest mean number. Bandirippuwa, Sri Lanka, reported the lowest mean for any zone I site with 5 pods per plant, and Angunukolapalessa, Sri Lanka, reported 60 pods per plant for the highest mean number.

In zone IV, the lowest mean number of pods was reported from Mayaguez, Puerto Rico, (12 pods per plant), and the highest was from Khon Kaen, Thailand, (69 pods per plant). The overall mean was 31 pods per plant. The range among cultivars was from 26 pods, for six different cultivars, to 45 pods for Jupiter.

The highest pod number for the cultivars in zone VII was 62 for Jupiter, and the lowest number was 30 for Williams. The mean for all cultivars was 44 pods per plant. Shanhua, Taiwan, had the lowest mean pod number for any site in zone VII with 22, and the highest reported was 55 pods from Pantnagar, India.

The mean pod number increased as latitude increased, with the largest change between zone IV and zone VII. All cultivars increased pod number as the distance from the equator increased. Pods per plant had a highly significant positive correlation with yield in zones I, IV, and VII (Tables 21, 22, and 23).

Seed Weight

The mean weight of 100 seeds for zone I was 18.6 g (Table 14). The range among cultivars was from 15.0 g to 21.2 g for Improved Pelican and Hampton 266A, respectively. Las Juntas, Costa Rica, reported the lowest mean weight (10.1 g/100 seeds), and the highest weight (22.6 g/100 seeds) was reported from Boliche, Ecuador. The two-year mean seed weight was the same as that reported for the second ISVEX (18.6 g/100 seeds). Hampton 266A again had the heaviest seeds with 20.2 g/100, and Hill had the lightest seeds with 17.0 g/100.

In zone IV the mean seed weight was 17.3 g/100 seeds. The heaviest seeds were produced by Hampton 266A (19.2 g/100), and Improved Pelican had the lightest seeds (13.8 g/100). The range in seed weight among sites was from 10.9 g/100 seeds for Los Banos, Philippines, to 21.0 g/100 seeds for Isabela, Puerto Rico. The mean seed weight for two years was 16.4 g/100 seeds, with a range from 12.9 g/100 seeds for Improved Pelican to 17.8 g/100 seeds for Hampton 266A and Williams.

The mean weight of 100 seeds for zone VII was 12.4 g. The cultivar mean ranged from 10.1 g/100 seeds for Improved Pelican to 14.5 g/100 seeds for Tracy. Shanhua, Taiwan, reported the lowest mean seed weight for any zone VII site with 10.3 g/100 seeds. The highest seed weight for any site in zone VII was 14.4 g/100 seeds for Pantnagar, India. The two-year mean seed weight was 13.3 g/100 seeds. Hill had the lightest seed at 12.1 g/100, and Bonus produced the heaviest seed with 14.2 g/100.

Seed weight decreased as latitude increased for all cultivars in the second ISVEX. Mean values also decreased with increased latitude when both years were combined. Seed weight and yield had a highly significant positive correlation for zones I, IV, and VII (Tables 21, 22, and 23).

Seed Quality

Seed quality ratings were made after harvest to evaluate the condition of the seed before storage or use. Poor-quality seed results in reduced stand establishment in future plantings, or unacceptable seed for commercial or food use. The score of 1.0 was very good quality seed, and 5.0 was very poor seed.

Zone I had the highest quality seed (2.08), and zone IV had the poorest seed (2.62). In zone I, Clark 63 had the poorest quality seed, and Hill had the best quality seed (Table 21). Bragg and Hampton 266A had the poorest seed in zone IV, and Improved Pelican had the best quality seed (Table 22). Table 23 shows Tracy to have the highest mean value for seed quality, and the poorest seed was produced by Bonus and Clark 63. The zone I sites in Asia had the best seed quality (1.86) among regions, and the African zone I sites reported the poorest seed quality (2.85).

Protein and Oil

Seed samples of each cultivar returned to INTSOY were analyzed for protein and oil contents at the University of Illinois. The seed analyzed was a composite sample

of each cultivar from all replications harvested at each site. Protein and oil analyses were not replicated.

Table 15 summarizes the protein and oil contents for cultivars and zones. Analyses for individual sites are included with other site data (Tables 24 through 109). The overall protein mean of 65 sites was 41.4 percent, and the oil mean was 22.6 percent. The range in protein content was from 39.6 percent for Forrest to 42.9 percent for Improved Pelican. Oil content ranged from 20.6 percent for Tracy to 23.3 percent for Hampton 266A and Jupiter. The range among sites for mean protein content was from 34.5 percent for Madrid, Spain, to 47.0 percent for Muneng, Indonesia. Oil content ranged from 16.6 percent for Shanhua, Taiwan, to 27.1 percent for Bandirippuwa, Sri Lanka.

Seeds were returned from 31 sites in zone I. The mean protein content was 41.4 percent and the mean oil content was 23.5 percent. The range in protein content was from 39.9 percent to 42.9 percent for Hill and Improved Pelican, respectively. Oil content ranged from 21.7 percent for Tracy to 24.6 percent for Hampton 266A.

Fourteen sites returned seed from zone IV, and the overall means for protein and oil content were 41.2 percent and 22.5 percent, respectively. Protein content ranged from 39.9 percent for Hill to 42.8 percent for Improved Pelican. The range in oil content was from 20.6 percent to 23.4 percent for Tracy and Hampton 266A, respectively.

Seed samples were returned from five sites in zone VII. The mean protein content was 41.5 percent, and the mean oil content was 21.0 percent. The range in protein content was from 38.8 percent to 45.0 percent for Clark 63 and Jupiter, respectively. Oil content ranged from 18.7 percent for Tracy to 23.4 percent for Clark 63.

The cultivar Tracy had the lowest oil content for all zones (Table 15). Hampton 266A had the highest oil content in the overall mean and in zones I and IV. The protein content of Hill was lowest in zones I and IV. Improved Pelican had the highest protein content overall and in zones I and IV.

Oil content decreased as latitude increased. Protein content was highest in zone VII, but varied little among zones.

SUMMARY

The yield potential of commercial U.S. soybean cultivars grown in tropical environments was encouraging. This report concentrates on those sites less than 30° from the equator and less than 500 m in altitude, where the majority of the trials were located. Within these parameters, yield was less when latitude increased. The number of days before flowering and maturity became greater as latitude increased. Plant height also increased as latitude increased and was highly correlated with lodging. However, lodging and shattering were not serious problems at most sites. In general, stand establishment was best at sites nearest the equator. Pod number increased, but seed weight decreased as latitude increased. Oil percentage decreased with increased latitude, but protein percentage was inconsistent.

Table 1. Soybean cultivars evaluated in the second International Soybean Variety Evaluation Experiment

Cultivar	Maturity Group	Pedigree
Bonus	IV	(Harosoy x Kent) x (Blackhawk x Harosoy)
Bossier	VII	Selection from Lee
Bragg	VII	Jackson x D49-2491
Calland	III	(Blackhawk x Harosoy) x Kent
Clark 63	IV	(Clark [7] x CNS) x (Clark [6] x Blackhawk)
Davis	VI	(Roanoke x [Ogden x CNS]) x (Ralsoy x Ogden)
Forrest	V	Dyer x Bragg
Hampton 266A	VIII	Majos x Lee
Hardee	VIII	(Roanoke x [Ogden x CNS]) x Improved Pelican
Hill	V	(Dunfield x Haberlandt) x (S-100 x CNS)
Improved Pelican	VIII	Tanloxi x PI 60406
Jupiter	IX	D49-2491 x Bilomi No. 3
Semmes	VII	(Ralsoy x Ogden) x D49-2491
Tracy	VI	(Hill x PI 171442) x (FC 31745 x D49-2510)
Williams	III	Wayne x (Clark x Adams)

Table 2. Description of environmental zones in the second International Soybean Variety Evaluation Experiment

Zone	Latitude	Elevation (m)	Number of Sites
I	$\leq 10^{\circ}59'$	≤ 500	37
II	$\leq 10^{\circ}59'$	501 - 1,000	1
III	$\leq 10^{\circ}59'$	$> 1,000$	5
IV	$11^{\circ} - 20^{\circ}59'$	≤ 500	21
V	$11^{\circ} - 20^{\circ}59'$	501 - 1,000	0
VI	$11^{\circ} - 20^{\circ}59'$	$> 1,000$	3
VII	$21^{\circ} - 30^{\circ}59'$	≤ 500	6
VIII	$21^{\circ} - 30^{\circ}59'$	501 - 1,000	2
IX	$21^{\circ} - 30^{\circ}59'$	$> 1,000$	1
X	$31^{\circ} - 40^{\circ}59'$	≤ 500	3
XI	$31^{\circ} - 40^{\circ}59'$	501 - 1,000	5
XII	$31^{\circ} - 40^{\circ}59'$	$> 1,000$	2

* \leq = less than or equal to.

** $>$ = greater than.

Table 3. Identification of sites where the second International Soybean Variety Evaluation Experiment was conducted and from which useful data were returned to INTSOY

Region	Country	Site	Latitude	Elevation (m)
Africa	Angola	Nova Lisboa	12° 44'S	1,700
	Cameroon	Wum	10° N	1,000
	Egypt	Bahteem	30° N	21
		Seds	29° N	
	Ethiopia	Awassa	7° N	1,700
		Bako	7° N	1,650
		Debre Zeit	8° 38'N	1,850
		Jimma	7° 46'N	1,756
	Ghana	Kwadaso	6° 41'N	270
		Legon	5° 39'N	60
	Ivory Coast	Abidjan	5° N	0
		Dekokaka	10° N	300
		N'Dakro	7° 50'N	200
	Nigeria	Kadawa	11° 45'N	
	Rhodesia	Salisbury	17° 48'S	1,506
	Sierra Leone	Njala	8° N	150
	Swaziland	Malkerns	27° S	610
	Zambia	Kitwe	13° S	1,800
Asia	Afghanistan	Baghlan	36° N	510
	India	Pantnagar	29° N	244
	Indonesia	Mumeng	6° S	10
	Malaysia	Serdang	3° N	30
	Nepal	Khumaltar	27° 40'N	1,360
	Pakistan	Parachinar	34° N	
		Sarai Naurang	33° N	305
		Swat	34° 46'N	895
		Tandojam	25° 2'N	19
	Philippines	Tarnab	33° N	347
		La Carlota	10° 24'N	74
		Los Banos	14° 10'N	15
		Sri Lanka	Alutharama*	7° 30'N
	Angunukolapalessa*		6° 20'N	25
	Bandirippuwa		7° 10'N	9
	Bandirippuwa		7° 23'N	30
	Gannoruwa*		7° 15'N	457
	Kilinochchi		9° 2'N	9
	Maha Illuppallama*		8° 5'N	138
	Maskeliya		7° N	1,295
	Puttalam*		8° 12'N	24
	Ratmalagara*		7° 23'N	30
(continued)				

*More than one experiment reported.

Table 3. Identification of sites where the second International Soybean Variety Evaluation Experiment was conducted and from which useful data were returned to INTSOY (continued)

Region	Country	Site	Latitude	Elevation (m)
Asia	Sri Lanka	Thirunelvely	9° 6'N	1
	Taiwan	Shanhua	22° 30'N	9
	Thailand	Chiang Mai	18° 47'N	314
		Khon Kaen	16° N	185
		Maejo	18° 14'N	317
Europe	Spain	Madrid	40° 30'N	600
Mesoamerica	Costa Rica	Las Juntas	10° N	
		Taboga	10° N	
	Dominican Republic	Santiago	19° 10'N	200
	El Salvador	Santa Cruz Porrillo	14° N	32
	Mexico	Apatzingan	19° 5'N	370
		Uxmal	20° 25'N	40
	Panama	Tocumen	9° 3'N	14
	Puerto Rico	Isabela*	18° 28'N	128
		Lajas	18° N	30
		Mayaguez	18° N	30
	Trinidad and Tobago	Port of Spain*	11° N	6
Middle East	Iran	Karaj	36° N	1,300
	Israel	Bet Dagan	32° N	80
	Jordan	Wadi Dhuleil	32° 9'N	580
	Lebanon	Bega'a	33° 55'N	995
	Saudi Arabia	Riyadh	24° 25'N	579
		Wadi Jizan	17° N	84
South America	Bolivia	Abapo-Izozog*	18° 30'S	389
		Palometillas*	17° 20'S	260
		Santa Cruz	17° 14'S	320
		Villa Montes	21° 15'S	448
	Colombia	Ibague	4° 42'N	385
		Motilonia	10° N	13
	Ecuador	Boliche	2° 21'S	17
		Pichilingue	1° 6'S	73
		Portoviejo	1° 4'S	44
	Guyana	Ebini	5° 33'N	18
		Mon Repos	6° 46'N	-1
	Venezuela	Maracay	10° 14'N	450

*More than one experiment reported.

Table 4. *List of cooperators in the second International Soybean Variety Evaluation Experiment*

Region	Country	Cooperator	Address
Africa	Angola	Mr. Abilio Silva and Mr. Jose Evangelista	Instituto de Investigacao Agronomica de Angola C.P. 406 Nova Lisboa, Angola
	Cameroon	Dr. H. D. Drechsler	Director Wum Area Development Authority Wum via Bamenda P. O. Box 13 Cameroon
	Egypt	Dr. Ali Abdel-Aziz	Head, Grain Legume Research Section Field Crops Research Institute Agricultural Research Centre Giza, Egypt
	Ethiopia	Mr. Abdurahman Ali	Institute of Agricultural Research Bako Research Station P. O. Box 3 Bako, Ethiopia
		Mr. Zewudu Oumer	Agronomist Awassa Experiment Station P. O. Box 16 Awassa, Sidamo Ethiopia
		General Agronomy Department	Jimma Research Station Box 192 Jimma, Ethiopia
		Dr. D. R. Schmidt	Debre Zeit Agriculture Experiment Station P. O. Box 32 Debre Zeit, Ethiopia
	Ghana	Dr. Bob Dadson	Department of Crop Science Faculty of Agriculture University of Ghana Legon, Ghana

(continued)

Table 4. *List of cooperators in the second International Soybean Variety Evaluation Experiment (continued)*

Region	Country	Cooperator	Address
Africa	Ghana	Mr. Hector Mercer-Quarshie	Crops Research Institute P. O. Box 3785 Kumasi, Ghana
	Ivory Coast	Dr. Assa Ayemou	B.P. 4322 Abidjan, Ivory Coast
	Nigeria	Kano River Project	Kano River Project P. O. Box 973 Kano, Nigeria
	Rhodesia	Dr. J. R. Tattersfield and Mr. J. S. Tichagwa	Salisbury Research Station Box 8100, Causeway Salisbury, Rhodesia
	Sierra Leone	Mr. S. M. Funnah	Njala University College Faculty of Agriculture Private Mail Bag Freetown, Sierra Leone
	Swaziland	Mr. C. E. Brook	Chief Research Officer Malkern's Research Station P. O. Box 4 Malkern's, Swaziland
	Zambia	Mr. H. Pors Simonsen	Kitwe Nutrition Group Farm P. O. Box 727 Kitwe, Zambia
Asia	Afghanistan	Mr. Soor Grul	Poze-i-shan Agriculture Research Station Baghlan Province Afghanistan
	India	Dr. B. B. Singh	Department of Plant Breeding G. B. Pant University of Agriculture and Technology Pantnagar, Nainital U. P., India
	Indonesia	Dr. Russell D. Freed	International Rice Research Institute JL. Merdeka 99 P. O. Box No. 107 Bogor, Indonesia

(continued)

Table 4. *List of cooperators in the second International Soybean Variety Evaluation Experiment (continued)*

Region	Country	Cooperator	Address
	Malaysia	Dr. Ajit Singh Sidhu and Mr. Ramli Bin Mohd. Noor	Malaysian Agricultural Research and Development Institute P. O. Box 208 Sungei Besi Serdang, Selangor Malaysia
	Nepal	Mrs. Meena Panday	Department of Agriculture Agriculture Botany Section Khumaltar, Lalilpur Nepal
	Pakistan	Mr. S. Sayed Badshah	Economic Botanist Agricultural Research Institute Tarnab, Peshawar Pakistan
		Mr. Altaf H. Chaudhry and Mr. M. Ilyas Qureshi	Agricultural Research Institute Tandojam, Sind Pakistan
	Philippines	Mr. Benjamin M. Legaspi and Mr. R. R. Matias	Legume Research Project Department of Agriculture and Natural Resources Bureau of Plant Industry Economic Garden Los Banos, Laguna The Philippines
		Mr. R. M. Payson	University of the Philippines at Los Banos College of Agriculture Research and Training Station La Granja, La Carlota Negros Occidental The Philippines

(continued)

Table 4. *List of cooperators in the second International Soybean Variety Evaluation Experiment (continued)*

Region	Country	Cooperator	Address
Asia	Sri Lanka	Mr. H. M. E. Herath	Central Agricultural Research Institute Gannoruwa Peradenya Sri Lanka
		Dr. I. P. S. Dias, Mr. A. Senthinathan, and Ms. S. Kumarskulasingham	Agricultural Research Centre Angunukolapalessa Sri Lanka
		Mr. B. N. Emerson and Mr. S. M. Santhirasivam	Agricultural Research Station Alutharama Mahiyangana Sri Lanka
		Mr. N. Kanaganayagam	Agricultural Research Station Kilinochchi Sri Lanka
		Mr. M. P. L. D. Martin, Mr. A. G. K. Silva, and Mr. T. A. Keerthirathna	Coconut Research Institute Sub- Station Ratmalagara Estate Madampe NWP Sri Lanka
		Mr. J. M. J. Jayamanna	Coconut Research Institute Bandirippuwa Estate Lunuwila Sri Lanka
		Mr. I. S. Padmasiri and Mr. S. Thirianathan	Agricultural Research Station Ilavankulam Puttalam Sri Lanka
		Mr. J. S. Selvaratnam	Agricultural Research Centre Thirunelvely, Jaffna Sri Lanka

(continued)

Table 4. *List of cooperators in the second International Soybean Variety Evaluation Experiment (continued)*

Region	Country	Cooperator	Address
Asia	Sri Lanka	Mr. A. O. C. de Zoysa	Agricultural Research Station Maha Illuppallama Sri Lanka
	Taiwan	Mr. S. Shanmugasundaram	Research Associate (Breeding) The Asian Vegetable Research and Development Center P. O. Box 42, Shanhua Tainan, 741 Taiwan, Republic of China
	Thailand	Dr. Arwooth NaLampang	Department of Agriculture Leader of Oil Crop Project Ministry of Agriculture Bangkhen, Bangkok 9 Thailand
		Dr. Dumrong Tiyawalee and Mr. S. Julsrigival	Plant Science Department Faculty of Agriculture Chiang Mai University Chiang Mai, Thailand
		Dr. T. Charoenwatana	Department of Plant Science Faculty of Agriculture Khon Kaen University Khon Kaen, Thailand
Europe	Spain	Dr. J. L. Montoya and Mr. Angeles Bueno	Centro Regional de Investigacion y Desarrollo Agrario -6 Department de Cereales Y Leguminosas Finca "EL ENCIN" Apartado de Correos 127 Alcala de Henares (Madrid) Spain
Mesoamerica	Costa Rica	Mr. Rodrigo Alfaro M.	In-Charge of the Soybean Program Ministerio de Agricultura y Ganaderia San Jose, Costa Rica

(continued)

Table 4. List of cooperators in the second International Soybean Variety Evaluation Experiment (continued)

Region	Country	Cooperator	Address
Mesoamerica	Costa Rica	Dr. A. M. Pinchinat	Geneticist Centro Agronomico Tropical de Investigacion Y Esenaza Turrialba, Costa Rica
	Dominican Republic	Ing. R. A. Jimenez	La Herradura Santiago Republica Dominicana
	El Salvador	Ing. Rodolfo Cristales and Ing. Romeo E. Lopez	Estacion Experiment de Santa Cruz Porrillo El Salvador
	Mexico	Ing. Benito Cazares E.	Instituto Nacional de Investigaciones Agricolas Campo Agricola Experimental Apdo. Postal No. 40 Apatzingan, Mich. Mexico
		Ing. N. S. Vazquez	Uxmal Experiment Station Apdo. 50 Suc. 'D' Merida, Yucatan Mexico
	Nicaragua	Dr. Fermin Balerdi	USAID/Nicaragua - Rural Development Division c/o American Embassy Managua, Nicaragua
	Panama	Ing. Juan Jose Franco	Facultad de Agronomia Universidad de Panama Estafeta Universitaria Panama Republic de Panama
	Puerto Rico	Dr. Raul Abrams	Department of Agronomy University of Puerto Rico Mayaguez Puerto Rico 00708

(continued)

Table 4. *List of cooperators in the second International Soybean Variety Evaluation Experiment (continued)*

Region	Country	Cooperator	Address
Mesoamerica	Puerto Rico	Dr. M. R. Ballester	Experiment Station and Seed Farm University of Puerto Rico Agricultural Experiment Station Lajas, Puerto Rico
		Mr. Frank J. Julia	Agronomo University of Puerto Rico Agricultural Experiment Station Isabela Substation Apartado 506 Isabela Puerto Rico 00662
		Dr. Eric G. Stone	Mayaguez Institute of Tropical Agriculture USDA - ARS P. O. Box 70 Mayaguez Puerto Rico 00708
	Trinidad	Mr. L. Bednarz	Chaguaramas Agricultural Development Project G.P.O. Mailbag 102 Port of Spain Trinidad and Tobago
	Iran	Dr. M. C. Amirshahi	Vice Dean Karaj Agricultural College University of Teheran Iran
Middle East	Israel	Dr. Baruch Retig	Agricultural Research Organization The Volcani Center P.O.B. 6 Bet Dagan, Israel
	Jordan	Mr. N. Katkhuda and	Agriculture Research Centre
		Mr. N. Musa	Wadi Dhuleil, Jordan

(continued)

Table 4. *List of cooperators in the second International Soybean Variety Evaluation Experiment (continued)*

Region	Country	Cooperator	Address
Middle East	Lebanon	Dr. S. Abu Shakra	Chairman Department of Crop Production and Protection American University of Beirut Beirut, Republic of Lebanon
	Saudi Arabia	Mr. M. Z. Juwana	Director Crop Production Division Dirab Agriculture Experiment Station Ministry of Agriculture and Water Riyadh, Saudi Arabia
		Dr. Salah Abdul Aziz S.	Wadi Jizan Development Project Wadi Jizan Saudi Arabia
South America	Bolivia	Ing. Herbert Zurita O.	Estacion Experimental Agricultura de Saavedra Casilla 247 Santa Cruz, Bolivia
		Ing. Mario Perez and Ing. Ponciano Araoz	Complejo Agroindustrial Gran Chao Villa Montes Bolivia
		Ing. Hugo Cervantes R. and Ing. Edilberto Cardona	6 de Agosto Proyecto Abapo-Izozog Santa Cruz Bolivia
		Ing. Vidal Velasco R.	Subestacion de Portachuelo Palometillas Bolivia

(continued)

Table 4. *List of cooperators in the second International Soybean Variety Evaluation Experiment (continued)*

Region	Country	Cooperator	Address
South America	Colombia	Ing. Gilberto Bastidas	Director of Nacional Programa Leguminosas de Grano y Oleaginosas Anuales I.C.A. Apdo. Aereo 233 Palmira, Colombia
		Ing. Darley Salazar R.	Centro Experimental Nataima Apdo. Aereo 527 Ibague, Colombia
	Ecuador	Ing. Eduardo Calero H.	Head Research 2 Oilseed Program Instituto Nacional de Investigaciones Agropecuarias Estacion Experimental Boliche Apartado No. 7069 Guayaquil, Ecuador
	Guyana	Mr. Christian Nwasike	Central Agriculture Station Mon Repos, Guyana
	Venezuela	Ing. Agr. Simon Ortega	Mejoramiento Genetico de Leguminosas Apdo. 4653 - Maracay 200 Venezuela

Table 5. Mean yield (kg/ha) of cultivars within selected environmental zones in the second International Soybean Variety Evaluation Experiment

Cultivar	Mean Yield (kg/ha)		
	Zone I	Zone IV	Zone VII
Jupiter	2599	2362	1278
Hampton 266A	2260	1858	1212
Hardee	2351	2047	1349
Improved Pelican	2427	2126	1298
Bossier	2635	2310	1700
Bragg	2293	1885	1078
Davis	2517	2152	1294
Tracy	1753	1613	1364
Forrest	2188	1904	1370
Hill	1992	1805	1101
Bonus	2014	2008	963
Clark 63	2173	1935	1094
Williams	2226	2018	1154
Mean	2264	2001	1250

Table 6. Mean rank of cultivars for high yield within selected environmental zones in the second International Soybean Variety Evaluation Experiment

Cultivar	Mean Rank		
	Zone I (37 sites)	Zone IV (21 sites)	Zone VII (6 sites)
Jupiter	4	1	8
Hampton 266A	7	9	10
Hardee	5	5	3
Improved Pelican	3	3	3
Bossier	2	2	1
Bragg	6	10	12
Davis	1	4	6
Tracy	13	13	2
Forrest	8	8	7
Hill	11	11	9
Bonus	12	12	13
Clark 63	10	6	11
Williams	8	7	3

Table 7. Two-year mean values for agronomic characteristics of the common cultivars tested in zone I during the first and second International Soybean Variety Evaluation Experiments

Cultivar	Yield (kg/ha)	Days to Flower	Days to Maturity	Plant Height (cm)	Lodging Score	100 Seed Weight (g)
Davis	2234	31	94	34	1.0	18.3
Williams	2096	28	87	45	1.2	19.8
Bragg	2072	29	91	36	1.2	18.8
Jupiter	2056	37	106	66	1.6	18.4
Hampton 266A	2042	29	92	32	1.2	20.2
Clark 63	1984	28	88	46	1.4	17.8
Hill	1819	31	87	35	1.4	17.0
Mean	2043	30	92	42	1.3	18.6

Table 8. Two-year mean values for agronomic characteristics of the common cultivars tested in zone IV during the first and second International Soybean Variety Evaluation Experiments

Cultivar	Yield (kg/ha)	Days to Flower	Days to Maturity	Plant Height (cm)	Lodging Score	100 Seed Weight (g)
Hardee	1988	38	106	36	1.1	16.5
Jupiter	1957	42	117	66	2.0	17.2
Davis	1932	36	102	38	1.0	16.7
Improved Pelican	1890	41	104	71	2.1	12.9
Williams	1872	31	92	44	1.2	17.8
Clark 63	1852	31	92	47	1.4	16.6
Hampton 266A	1760	34	100	34	1.1	17.8
Bragg	1698	34	102	36	1.0	16.8
Hill	1668	36	96	36	1.3	15.0
Mean	1846	36	101	45	1.4	16.4

Table 9. Two-year mean values for agronomic characteristics of the common cultivars tested in Zone VII during the first and second International Soybean Variety Evaluation Experiments

Cultivar	Yield (kg/ha)	Days to Flower	Days to Maturity	Plant Height (cm)	Lodging Score	100 Seed Weight (g)
Williams	1346	31	94	48	1.0	14.0
Davis	1312	41	108	55	1.0	12.6
Clark 63	1302	32	96	56	1.2	13.6
Hill	1206	42	99	50	1.3	12.1
Bonus	1049	29	92	48	1.0	14.2
Mean	1243	35	98	51	1.1	13.3

Table 10. Mean days to flower of cultivars within selected environmental zones in the second International Soybean Variety Evaluation Experiment

Cultivar	Mean Days to Flower		
	Zone I	Zone IV	Zone VII
Jupiter	37	41	53
Hampton 266A	28	32	47
Hardee	32	37	45
Improved Pelican	34	40	58
Bossier	34	40	49
Bragg	28	33	39
Davis	30	35	43
Tracy	27	31	44
Forrest	28	34	41
Hill	31	35	43
Bonus	26	27	28
Clark 63	27	30	30
Williams	27	30	29
Mean	30	35	42

Table 11. Mean days to maturity of cultivars within selected environmental zones in the second International Soybean Variety Evaluation Experiment

Cultivar	Mean Days To Maturity		
	Zone I	Zone IV	Zone VII
Jupiter	109	118	123
Hampton 266A	93	100	115
Hardee	97	109	114
Improved Pelican	97	106	118
Bossier	98	105	117
Bragg	92	103	105
Davis	96	101	113
Tracy	85	91	111
Forrest	91	98	101
Hill	88	93	100
Bonus	87	88	92
Clark 63	89	91	92
Williams	87	89	90
Mean	93	99	107

Table 12. Mean plant height (cm) of cultivars within selected environmental zones in the second International Soybean Variety Evaluation Experiment

Cultivar	Mean Plant Height (cm)		
	Zone I	Zone IV	Zone VII
Jupiter	69	70	82
Hampton 266A	32	35	55
Hardee	33	35	59
Improved Pelican	70	77	97
Bossier	49	53	85
Bragg	37	37	59
Davis	34	37	67
Tracy	32	32	61
Forrest	35	36	58
Hill	36	36	51
Bonus	45	50	54
Clark 63	47	49	61
Williams	46	45	54
Mean	44	45	65

Table 13. Mean pods per plant of cultivars within selected environmental zones in the second International Soybean Variety Evaluation Experiment

Cultivar	Mean Pods Per Plant		
	Zone I	Zone IV	Zone VII
Jupiter	38	45	62
Hampton 266A	25	26	45
Hardee	33	41	49
Improved Pelican	38	44	57
Bossier	30	33	52
Bragg	26	26	41
Davis	29	30	44
Tracy	22	26	43
Forrest	30	36	46
Hill	25	27	42
Bonus	24	26	32
Clark 63	24	26	32
Williams	22	26	30
Mean	28	31	44

Table 14. Mean seed weight (g/100 seeds) of cultivars within selected environmental zones in the second International Soybean Variety Evaluation Experiment

Cultivar	Mean Seed Weight (g/100 seeds)		
	Zone I	Zone IV	Zone VII
Jupiter	19.4	17.9	11.8
Hampton 266A	21.2	19.2	12.2
Hardee	18.0	17.8	12.1
Improved Pelican	15.0	13.8	10.1
Bossier	17.9	16.4	12.1
Bragg	19.5	17.9	12.1
Davis	19.2	17.5	12.9
Tracy	19.8	18.3	14.5
Forrest	16.2	15.5	10.8
Hill	17.2	15.8	12.3
Bonus	19.5	17.3	14.1
Clark 63	18.4	17.4	12.8
Williams	20.4	18.8	12.8
Mean	18.6	17.3	12.4

Table 15. Mean protein and oil values of cultivars in the second International Soybean Variety Evaluation Experiment

Cultivar	Mean Value (percent)					
	All Zones (65 sites)		Zone I (31 sites)		Zone IV (14 sites)	
	Protein	Oil	Protein	Oil	Protein	Oil
Jupiter	41.6	23.3	41.2	24.2	40.6	23.1
Hampton 266A	40.5	23.3	40.2	24.6	40.8	23.4
Hardee	41.8	23.1	41.6	24.0	41.2	22.6
Improved Pelican	42.9	22.4	42.9	23.3	42.8	22.3
Bossier	41.8	22.8	41.9	23.7	41.5	22.6
Bragg	41.5	22.5	41.7	23.2	40.9	22.8
Davis	41.0	22.6	40.8	23.2	40.9	22.5
Tracy	42.8	20.6	42.7	21.7	42.2	20.6
Forrest	39.6	22.1	40.0	23.5	40.5	22.6
Hill	39.7	22.3	39.9	22.9	39.9	22.5
Bonus	42.5	22.8	42.5	23.5	41.2	22.4
Clark 63	41.3	22.9	41.6	23.4	40.8	23.0
Williams	41.3	23.2	41.7	24.0	41.1	22.7
Mean	41.4	22.6	41.4	23.5	41.2	22.5
					41.5	21.0
					45.0	19.4
					41.5	20.3
					41.3	21.2
					43.3	20.0
					42.0	21.1
					41.2	21.4
					42.1	19.7
					43.0	18.7
					41.0	20.5
					39.1	21.6
					41.2	22.3
					38.8	23.4
					40.8	22.4

TABLE 16 COMBINED ANALYSIS OF AFRICAN SITES IN ZONE I FOR ISVEX-2

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
BOSSIER	1781.56	35.83	96.33	139.31	348.25	1.21	4.64	41.40	1.21
IMPROVED PELICAN	1610.94	36.00	97.04	96.69	266.92	0.78	2.91	62.53	1.50
DAVIS	1570.51	31.54	94.29	112.38	267.42	1.30	3.33	30.75	1.38
HARDEE	1529.28	32.79	97.38	124.81	250.83	1.01	2.34	28.06	1.29
ERAGG	1381.45	28.67	90.79	154.69	315.67	1.06	2.43	30.55	1.50
HAMPTON 266A	1322.26	29.38	93.75	137.56	367.00	1.04	5.01	27.73	1.29
FORREST	1293.91	29.04	91.71	145.44	245.50	1.15	2.64	28.29	1.33
HILL	1233.09	31.04	87.50	105.31	177.92	0.99	1.94	27.71	1.54
CLARK 63	1115.46	26.96	86.08	109.50	256.08	1.11	3.09	38.20	1.13
WILLIAMS	1087.17	27.00	87.38	133.94	301.75	1.02	3.45	34.75	1.25
BONUS	994.64	26.71	86.00	133.88	230.25	1.01	2.41	35.22	1.33
TRACY	976.45	27.83	86.63	114.25	187.83	1.05	4.08	26.13	1.42
GRAND MEAN	1324.73	30.23	91.24	125.65	267.95	1.06	3.19	34.28	1.35
NUMBER EXPERIMENTS CONTRIBUTING	6	6	6	4	3	3	3	6	6
STANDARD ERROR OF VARIETY MEAN	129.32	0.50	1.19	29.59	63.29	0.20	1.03	2.70	0.14
COEFFICIENT OF VARIATION	47.82%	8.10%	6.40%	94.20%	81.82%	65.50%	112.11%	38.62%	49.64%
5% LSD VARIETY MEANS (*****=NS)	366.51	1.42	3.38	*****	*****	*****	*****	7.66	*****
CORRELATIONS AND NUMBER OF OBSERVATIONS									
(+ - PROB=-.05, ++ - PROB=-.01)									
YIELD	1.00	0.14+	0.28++	0.75++	0.69++	0.68++	0.22++	0.30++	-0.19+
DAYS TO FLOWER	288	288	288	192	144	144	144	288	288
DAYS TO MATURITY	0.14+	1.00	0.47++	-0.03	0.25++	0.24++	0.07	0.24++	-0.11
NODULE NUMBER 1	288	288	288	192	144	144	144	288	288
NODULE NUMBER 2	0.28++	0.47++	1.00	0.03	0.09	0.15	-0.11	0.17++	0.20++
NODULE WEIGHT 1	288	288	288	192	144	144	144	288	288
NODULE WEIGHT 2	0.75++	-0.03	0.03	1.00	0.81++	0.87++	0.37++	0.04	-0.22++
PLANT	192	192	192	192	144	144	144	192	192
HEIGHT	0.69++	0.25++	0.09	0.81++	1.00	0.69++	0.67++	0.25++	-0.29++
LCDGING	144	144	144	144	144	144	144	144	144
SHATTER	0.68++	0.24++	0.15	0.87++	0.69++	1.00	0.32++	0.12	-0.17+
PLANTS	0.22++	144	144	144	144	144	144	144	144
HARVEST	0.30++	0.24++	0.17++	0.37++	0.67++	0.32++	1.00	0.13	-0.26++
FOODS PER	288	288	288	192	144	144	144	288	288
100 SEED	-0.19++	-0.11	0.20++	-0.22++	0.25++	0.12	0.13	1.00	-0.06
WEIGHT	288	288	288	192	144	144	144	288	288
QUALITY OF SEED	-0.17++	0.07	0.09	-0.11	0.03	-0.17+	-0.26++	-0.06	1.00
	288	288	288	192	144	144	144	288	288
	0.50++	0.27++	0.16+	0.50++	0.56++	0.64++	0.12	0.19++	-0.13
	240	240	240	192	144	144	144	240	240
	0.28++	0.12	0.01	0.08	-0.04	-0.16	0.11	0.27++	-0.20++
	240	240	240	192	144	144	144	240	240
	0.38++	-0.27++	0.03	0.34++	0.20+	0.18+	-0.03	-0.33++	-0.07
	288	288	288	192	144	144	144	288	288
	-0.49++	-0.02	-0.00	-0.08	-0.14	-0.04	-0.27++	-0.34++	0.26++
	240	240	240	144	144	144	144	240	240

TABLE 16 COMBINED ANALYSIS OF AFRICAN SITES IN ZONE I FOR ISVEX-2

VARIETY OF CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
BOSSIER	1.08	114.75	32.40	17.38	2.70
IMPROVED PELICAN	1.08	110.85	40.66	14.12	2.50
DAVIS	1.00	111.55	30.70	18.34	2.65
HARDEE	1.08	88.90	33.44	18.15	2.60
BRAGG	1.04	119.65	24.74	19.47	3.00
HAMPTON 266A	1.08	110.35	22.94	18.94	2.95
FORREST	1.13	103.10	31.49	15.85	3.05
HILL	1.00	123.75	23.49	15.99	2.85
CLARK 63	1.08	122.95	21.19	17.23	3.05
WILLIAMS	1.13	106.40	18.80	19.54	2.60
BCNUS	1.17	117.95	23.57	19.25	3.25
TRACY	1.08	95.70	22.09	19.27	2.95
GRAND MEAN	1.08	110.49	27.12	17.79	2.85
NUMBER EXPERIMENTS CONTRIBUTING	6	5	5	6	5
STANDARD ERROR OF VARIETY MEAN	0.05	6.65	1.94	0.54	0.24
COEFFICIENT OF VARIATION	23.74%	26.92%	32.06%	14.79%	38.46%
5% LSD VARIETY MEANS (*****=NS)	*****	18.96	5.54	1.52	*****
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROB=-.05, ++ - PROB=-.01)					
YIELD KG/HA	-0.17++	0.50++	0.28++	0.38++	-0.49++
DAYS TO FLOWER	288	240	240	288	240
	0.07	0.27++	0.12	-0.27++	-0.02
DAYS TO MATURITY	288	240	240	288	240
	0.09	0.16+	0.01	0.03	-0.00
NODULE NUMBER 1	288	240	240	288	240
	-0.11	0.50++	0.08	0.34++	-0.08
NODULE NUMBER 2	192	192	192	192	144
	0.03	0.56++	-0.04	0.20+	-0.14
NODULE WEIGHT 1	144	144	144	144	144
	0.05	0.64++	-0.16	0.18+	-0.04
NODULE WEIGHT 2	144	144	144	144	144
	0.01	0.12	0.11	-0.03	-0.27++
PLANT HEIGHT	144	144	144	144	144
	0.13+	0.19++	0.27++	-0.33++	-0.34++
LCDGING	288	240	240	288	240
	0.08	-0.13	-0.20++	-0.07	0.26++
SHATTER	288	240	240	288	240
	1.00	0.10	-0.19++	-0.22++	-0.06
PLANTS HARVEST	288	240	240	288	240
	0.10	1.00	-0.38++	0.12	0.10
PODS PER PLANT	240	240	240	240	192
	-0.19++	-0.38++	1.00	-0.07	-0.36++
100 SEED WEIGHT	240	240	240	240	192
	-0.22++	0.12	-0.07	1.00	0.03
QUALITY OF SEED	288	240	240	288	240
	-0.06	0.10	-0.36++	0.03	1.00
	240	192	192	240	240

TABLE 17 COMBINED ANALYSIS OF ASIAN SITES IN ZONE I FOR ISVEX-2

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
DAVIS	1.00	185.78	23.39	18.86	1.63
BOSSIRE	1.06	190.80	24.46	17.67	1.71
HARDEE	1.03	170.61	29.11	17.81	1.59
IMPROVED PELICAN	1.11	189.75	33.24	14.58	1.76
JUPIEIE	1.07	185.08	31.27	18.86	2.45
WILLIAMS	1.17	188.51	18.92	20.64	1.80
HAFPTON 266A	1.00	183.05	21.68	20.69	1.76
FORREST	1.01	186.32	24.92	16.03	1.99
BRAGG	1.03	186.72	21.60	19.37	1.92
CLARK 63	1.01	184.86	20.49	18.45	1.92
HILL	1.04	182.86	21.21	16.55	1.54
BCNUS	1.01	188.18	21.14	19.58	2.00
TRACY	1.00	182.91	18.38	19.72	2.08
GRAND MEAN	1.04	185.03	23.83	18.37	1.86
NUMBER EXPERIMENTS CONTRIBUTING	18	19	19	19	19
STANDARD ERROR OF VARIETY MEAN	0.05	3.29	1.27	0.32	0.14
COEFFICIENT OF VARIATION	44.21%	15.51%	46.62%	14.96%	67.56%
5% LSD VARIETY MEANS (*****=NS)	*****	9.18	3.55	0.88	0.40
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROE=.05, +- - PROE=.01)					
YIELD	KG/HA	0.21++	0.27++	0.26++	-0.22++
		936	988	988	988
DAYS TO FLOWER		0.08+	0.21++	-0.19++	0.18++
		936	988	988	988
DAYS TO MATURITY		-0.05	0.34++	0.17++	0.33++
		936	988	988	988
NODULE NUMBER 1		0.05	-0.00	0.24++	-0.01
		936	988	988	988
NODULE NUMBER 2		-0.04	0.17++	0.25++	-0.01
		936	988	988	988
NODULE WEIGHT 1		-0.03	0.19++	0.14++	-0.09++
		936	988	988	988
NODULE WEIGHT 2		-0.09++	0.31++	0.18++	-0.07+
		936	988	988	988
PLANT	HEIGHT	-0.02	0.31++	-0.18++	0.01
		936	988	988	988
	LODGING	0.01	0.23++	0.02	0.14++
		936	988	988	988
	SHATTER	1.00	-0.06	0.04	0.05
		936	936	936	936
PLANTS	HARVEST	0.06	-0.60++	-0.13++	-0.12++
		936	988	988	988
PODS PER	PLANT	-0.06	1.00	0.07+	0.13++
		936	988	988	988
100 SEED	WEIGHT	0.04	0.07+	1.00	0.07+
		936	988	988	988
QUALITY	OF SEED	0.05	0.13++	0.07+	1.00
		936	988	988	988

TABLE 18 COMBINED ANALYSIS OF SOUTH AMERICAN SITES IN ZONE I FOR ISVEX-2

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
JUPITEE	3358.52	36.71	107.36	177.17	293.45	1.05	3.07	72.87	1.53
BOSSIER	3152.15	36.04	94.75	200.83	344.60	1.28	3.36	52.38	1.84
IMPROVED PELICAN	2725.74	36.21	98.32	139.88	376.84	0.99	3.76	76.84	2.34
DAVIS	2648.27	30.43	93.61	172.08	269.40	1.17	2.52	32.52	1.13
BRAGG	2482.76	28.50	88.89	161.58	292.35	0.90	2.68	37.50	1.16
WILLIAMS	2331.82	26.50	82.82	159.33	227.20	1.06	2.71	51.25	1.31
HAMPTON 266A	2318.07	28.50	90.29	136.54	284.05	0.81	2.60	31.25	1.16
FORRES1	2273.60	29.18	88.39	142.29	263.90	0.80	2.27	35.12	1.16
CLARR 63	2231.74	26.43	83.57	138.58	185.05	0.86	2.66	50.63	1.53
HARDEE	2216.14	32.68	94.29	150.08	305.85	1.05	2.97	33.09	1.13
BCNDS	2088.17	25.71	82.79	152.63	177.90	0.87	1.80	48.24	1.16
HILL	2061.01	31.57	85.29	141.63	153.05	0.81	1.97	34.68	1.59
TRACY	1764.60	26.86	80.32	157.00	189.10	1.16	2.56	33.18	1.13
GRAND MEAN	2434.81	30.41	90.05	156.13	254.19	0.99	2.69	45.35	1.40
NUMBER EXPERIMENTS CONTRIBUTING	8	7	7	6	5	6	5	8	8
STANDARD ERROR OF VARIETY MEAN	175.76	0.54	1.73	15.37	35.37	0.11	0.40	2.21	0.17
COEFFICIENT OF VARIATION	40.83%	9.38%	10.19%	48.23%	62.24%	55.51%	66.84%	27.54%	68.39%
5% LSD VARIETY MEANS (****=NS)	494.30	1.52	4.89	*****	100.59	0.32	*****	6.21	0.47

CORRELATIONS AND NUMBER OF OBSERVATIONS									
(+ - PROB=.05, +- - PROB=.01)									
YIELD	1.00	0.26++	0.57++	-0.17++	0.35++	-0.08	0.23++	0.37++	0.10+
DAYS TO FLOWER	0.26++	1.00	0.61++	0.37++	0.12+	0.35++	0.14+	0.39++	0.46
DAYS TO MATURITY	0.57++	0.61++	1.00	0.13+	0.25++	0.20++	0.19++	0.29++	0.22++
NODULE NUMBER 1	-0.17++	0.37++	0.13+	1.00	0.27++	0.79++	0.41++	-0.00	0.20++
NODULE NUMBER 2	0.35++	0.12+	0.25++	0.27++	1.00	0.29++	0.81++	0.19++	0.07
NODULE WEIGHT 1	-0.08	0.35++	0.20++	0.79++	0.29++	1.00	0.41++	0.02	0.32
NODULE WEIGHT 2	0.23++	0.14+	0.19++	0.41++	0.81++	0.41++	1.00	0.22++	-0.14+
PLANT HEIGHT	0.37++	0.39++	0.29++	-0.00	0.19++	0.02	0.22++	1.00	0.13+
LODGING	0.10+	0.22++	0.36+	-0.07	0.26	0.32	0.26	0.26++	0.26
SHATTER	-0.19++	-0.17++	0.36+	0.32	-0.09	-0.14+	-0.13+	0.46	0.07
HARVEST	0.54++	-0.10	0.08	0.11	0.21++	0.16++	0.21++	0.26++	0.46
FOODS PER PLANT	0.47++	0.49++	0.38++	-0.24++	0.22++	-0.22++	0.11	0.56++	0.07
100 SEED WEIGHT	0.23++	-0.07	0.43++	0.14+	0.08	0.23++	0.07	-0.14++	0.03
QUALITY OF SEED	-0.35++	-0.34++	-0.32++	-0.14+	-0.44++	-0.21++	-0.48++	-0.47++	-0.17++
	312	260	260	260	208	260	208	312	364

TABLE 18 COMBINED ANALYSIS OF SOUTH AMERICAN SITES IN ZONE I FOR ISVEI-2

VARIETY CR CROSS	SHATTER	PLANTS HARVEST	PCDS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
JUPIER	1.00	176.79	48.28	21.13	1.63
BCSSIER	1.00	190.96	36.11	18.31	2.29
IMPROVED PELICAN	1.00	175.04	45.84	15.58	1.58
DAVIS	1.04	171.96	36.73	19.92	2.63
FRAGG	1.00	182.96	31.40	20.09	2.83
WILLIAMS	1.00	181.46	26.43	20.83	2.54
HAMPTON 266A	1.00	168.46	28.76	22.63	2.96
FORREST	1.00	159.71	33.60	16.45	2.46
CLARK 63	1.00	187.86	29.26	18.61	3.00
HARDEF	1.00	143.71	39.26	18.65	2.50
BCNUS	1.11	190.75	29.84	19.07	3.21
HILL	1.11	157.18	30.31	18.35	2.50
TRACY	1.11	169.61	27.82	19.31	3.00
GRAND MEAN	1.03	173.57	34.13	19.15	2.55
NUMBER EXPERIMENTS CONTRIBUTING	7	7	7	7	6
STANDARD ERROR OF VARIETY MEAN	0.05	11.93	1.91	0.57	0.26
COEFFICIENT OF VARIATION	23.93%	36.37%	29.69%	15.89%	49.26%
5% LSD VARIETY MEANS (*****NS)	*****	*****	5.40	1.62	0.72
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, +- - PROB=.01)					
YIELD KG/HA	-0.19++	0.54++	0.47++	0.23++	-0.35++
DAYS TO FLOWER	-0.17++	-0.10	0.49++	-0.07	-0.34++
DAYS TO MATURITY	-0.25++	0.08	0.38++	0.43++	-0.32++
NODULE NUMBER 1	0.00	0.11	-0.24++	0.14+	-0.14+
NODULE NUMBER 2	0.00	0.21++	0.22++	0.08	-0.44++
NODULE WEIGHT 1	0.00	0.16++	-0.22++	0.23++	-0.21++
NODULE WEIGHT 2	0.00	0.21++	0.11	0.07	-0.48++
PLANT HEIGHT	-0.00	0.22++	0.56++	-0.14++	-0.47++
LODGING	-0.07	-0.05	0.03	-0.17++	0.08
SHATTER	1.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	0.00	1.00	-0.04	0.12+	-0.17++
PODS PER PLANT	0.00	-0.04	1.00	-0.13+	-0.37++
100 SEED WEIGHT	0.00	0.12+	-0.13+	1.00	0.04
QUALITY OF SEED	0.00	-0.17++	-0.37++	0.04	1.00
	260	312	312	312	312

TABLE 19 COMBINED ANALYSIS OF BOLIVIAN SITES IN ZONE IV FOR ISVEX-2

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
JUPITER	2995.85	43.40	119.70	118.58	539.25	1.01	3.50	67.55	1.80
BOSSIER	2545.76	41.15	101.45	153.42	514.75	1.15	4.34	50.40	1.20
DAVIS	2438.49	38.90	107.75	156.00	441.08	1.49	3.59	36.90	1.00
IMPROVED PELICAN	2347.30	41.25	105.40	96.42	577.58	0.94	4.00	61.00	1.65
WILLIAMS	2270.95	35.80	96.00	152.67	156.92	0.84	2.01	38.05	1.45
FORREST	2261.70	38.00	107.30	70.75	219.08	0.40	1.39	35.25	1.00
BRAGG	2208.94	36.30	113.15	99.83	177.50	0.51	1.83	36.15	1.05
HAMPTON 266A	2145.85	36.00	109.35	162.17	238.67	1.23	2.85	36.85	1.00
HILL	2143.01	39.00	101.55	118.83	217.08	0.65	2.20	37.85	1.25
CLARK 63	1993.73	35.25	100.75	148.42	199.50	0.82	3.00	42.55	1.60
HARDEE	1848.45	39.80	109.20	65.83	198.00	0.67	1.05	31.70	1.00
TRACY	1603.57	34.75	98.50	182.00	203.75	0.94	3.19	28.05	1.00
GRAND MEAN	2233.63	38.30	105.84	127.08	306.93	0.89	2.74	41.86	1.25
NUMBER EXPERIMENTS CONTRIBUTING	5	5	5	3	3	2	2	5	5
STANDARD ERROR OF VARIETY MEAN	209.76	1.20	3.02	27.32	180.24	0.24	0.77	3.23	0.12
COEFFICIENT OF VARIATION	42.00%	14.02%	12.77%	74.49%	203.43%	76.66%	78.86%	34.50%	43.94%
5% LSD VARIETY MEANS (****=NS)	597.85	3.42	8.61	*****	*****	*****	*****	9.20	0.35
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, +- - PROB=.01)									
YIELD	1.00	-0.08	-0.02	0.44++	0.16+	-0.09	-0.01	0.70++	0.01
DAYS TO FLOWER	240	240	240	144	144	96	96	240	240
DAYS TO MATURITY	-0.08	1.00	0.48++	0.03	0.18+	-0.08	0.10	0.16+	0.19++
MODULE NUMBER 1	240	0.48++	1.00	0.13	-0.12	-0.19	96	240	0.08
MODULE NUMBER 2	240	0.03	0.13	1.00	0.13	0.50++	96	240	240
MODULE WEIGHT 1	144	144	144	144	144	96	96	144	-0.14
MODULE WEIGHT 2	96	0.18+	-0.12	0.13	1.00	0.23+	0.76++	0.40++	-0.13
PLANT HEIGHT	0.70++	0.16+	-0.01	0.28++	0.40++	0.11	0.37++	0.11	144
LODGING	240	240	0.08	-0.14	-0.13	96	96	240	-0.12
SHATTER	0.01	0.19++	240	144	144	1.00	0.48++	0.37++	96
PLANTS HARVEST	-0.40++	0.07	0.25++	-0.03	-0.15	0.06	1.00	0.15+	-0.07
PODS PER PLANT	240	240	240	144	144	96	96	240	0.08
100 SEED WEIGHT	0.09	-0.04	-0.25++	0.22++	0.32++	0.26+	0.50++	0.12	0.02
QUALITY OF SEED	0.64++	-0.01	0.14+	0.02	-0.06	-0.33++	-0.40++	0.62++	0.02
	240	240	240	144	144	96	96	240	240
	0.10	0.35++	0.36++	0.35++	-0.06	-0.08	-0.30++	-0.01	-0.19++
	240	240	240	144	144	96	96	240	240
	0.17++	-0.17++	0.27++	0.31++	-0.12	-0.01	-0.20+	0.07	-0.24++
	240	240	240	144	144	96	96	240	240

TABLE 19 COMBINED ANALYSIS OF BOLIVIAN SITES IN ZONE IV FOR ISVEX-2

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
JUPITER	1.25	161.85	51.53	19.78	2.55
BOSSIER	1.10	177.20	32.33	16.95	1.95
DAVIS	1.30	154.95	30.66	19.96	2.80
IMPROVED PELICAN	1.15	152.65	49.99	14.42	1.95
WILLIAMS	1.05	155.55	29.42	19.35	2.00
FOREST	1.35	131.25	39.14	17.77	2.50
BRAGG	1.35	153.50	25.78	19.61	3.05
HAMPTON 266A	1.60	156.50	24.70	21.58	2.80
HILL	1.35	190.15	27.66	16.15	2.15
CLARK 63	1.15	159.45	28.45	17.78	2.65
HAEDER	1.55	98.70	51.55	19.60	2.70
TRACY	1.55	142.15	24.89	19.04	3.20
GRAND MEAN	1.31	152.83	34.67	18.50	2.53
NUMBER EXPERIMENTS CONTRIBUTING	5	5	5	5	5
STANDARD ERROR OF VARIETY MEAN	0.12	13.28	4.72	0.60	0.28
COEFFICIENT OF VARIATION	39.97%	38.86%	60.86%	14.53%	49.87%
5% LSD VARIETY MEANS (*****NS)	0.33	37.85	13.45	1.71	0.80
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROB=.05, ++ - PROB=.01)					
YIELD	KG/HA	0.09	0.64++	0.10	0.17++
		240	240	240	240
DAYS TO FLOWER	0.07	-0.04	-0.01	0.35++	-0.17++
		240	240	240	240
DAYS TO MATURITY	0.25++	-0.25++	0.14+	0.36++	0.27++
		240	240	240	240
NODULE NUMBER 1	-0.03	0.22++	0.02	0.35++	0.31++
		144	144	144	144
NODULE NUMBER 2	-0.15	0.32++	-0.06	-0.06	-0.12
		144	144	144	144
NODULE WEIGHT 1	0.06	0.26+	-0.33++	-0.08	-0.01
		96	96	96	96
NODULE WEIGHT 2	-0.13	0.50++	-0.40++	-0.30++	-0.20+
		96	96	96	96
PLANT HEIGHT	-0.40++	0.12	0.62++	-0.01	0.07
		240	240	240	240
LODGING	-0.07	0.08	0.02	-0.19++	-0.24++
		240	240	240	240
SHATTER	1.00	-0.14+	-0.28++	0.09	0.08
		240	240	240	240
PLANTS HARVEST	-0.14+	1.00	-0.43++	-0.18++	-0.22++
		240	240	240	240
PODS PER PLANT	-0.28++	-0.43++	1.00	0.01	0.21++
		240	240	240	240
100 SEED WEIGHT	0.09	-0.18++	0.01	1.00	0.29++
		240	240	240	240
QUALITY OF SEED	0.08	-0.22++	0.21++	0.29++	1.00
		240	240	240	240

TABLE 20 COMBINED ANALYSIS OF MESOAMERICAN SITES IN ZONE IV FOR ISVEX-2

VARIETY CR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
BOSSIER	2425.02	40.40	110.42	179.46	304.72	2.50	4.11	54.37	2.00
JUPITER	2402.08	42.35	123.83	160.57	267.00	1.87	3.72	72.42	1.98
DAVIS	2297.53	35.96	104.52	143.57	206.88	1.79	2.79	39.72	1.15
WILLIAMS	2225.01	30.23	92.15	176.57	190.19	1.81	2.63	49.08	1.40
CLARK 63	2202.56	29.96	94.44	146.36	159.19	1.42	2.73	52.69	1.77
HAMPTON 266A	2154.12	31.81	103.31	188.14	230.16	1.37	2.50	35.83	1.13
BPAGG	2055.80	33.15	104.35	133.04	250.88	1.58	2.60	39.73	1.15
FCRREST	2022.49	34.29	101.00	136.50	247.16	1.52	3.02	39.39	1.15
HILL	1800.96	35.58	97.58	124.75	170.47	2.15	2.97	38.99	1.31
GRAND MEAN	2180.62	34.86	103.51	154.33	225.18	1.78	3.01	46.91	1.45
NUMBER EXPERIMENTS CONTRIBUTING	13	13	13	7	8	7	8	13	12
STANDARD ERROR OF VARIETY MEAN	132.11	0.98	2.81	17.13	27.54	0.37	0.44	1.89	0.14
COEFFICIENT OF VARIATION	43.69%	20.24%	19.60%	58.74%	69.19%	108.75%	82.81%	29.10%	65.05%
5% ISD VARIETY MEANS (*****=NS)	370.86	2.75	7.90	*****	78.03	*****	*****	5.31	0.33
CORRELATIONS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)									
YIELD	1.00	-0.39++	-0.01	0.23++	0.30++	0.34++	0.51++	0.42++	0.16++
DAYS TO FLOWER	468	468	468	252	288	252	288	468	432
DAYS TO MATURITY	-0.39++	1.00	0.41++	-0.08	-0.09	-0.21++	-0.34++	-0.10+	-0.12+
NODULE NUMBER 1	468	468	468	252	288	252	288	468	432
NODULE NUMBER 2	-0.01	0.41++	1.00	0.15+	0.05	0.21++	-0.03	0.16++	0.07
NODULE WEIGHT 1	468	468	468	252	288	252	288	468	432
NODULE WEIGHT 2	0.23++	-0.08	0.15+	1.00	0.66++	0.66++	0.65++	0.24++	0.06
PLANT	252	252	252	252	252	252	252	252	252
HEIGHT	0.30++	-0.09	0.05	0.66++	1.00	0.30++	0.64++	0.28++	0.15+
LODGING	288	288	288	252	288	252	288	288	-0.01
SHATTER	0.34++	-0.21++	0.21++	0.66++	0.30++	1.00	0.76++	0.34++	252
HARVEST	252	252	252	252	252	252	252	252	252
PLANTS	0.51++	-0.34++	-0.03	0.65++	0.64++	0.76++	1.00	0.54++	0.21++
PODS PER	288	288	288	252	288	252	288	288	288
100 SEED	0.42++	-0.10+	0.16++	0.24++	0.28++	0.34++	0.54++	1.00	0.49++
QUALITY OF SEED	468	468	468	252	288	252	288	468	432
	0.16++	-0.12+	0.07	0.06	0.15+	-0.01	0.21++	0.49++	1.00
	432	432	432	252	288	252	288	432	432
	0.03	-0.22++	0.07	-0.13+	-0.06	-0.01	-0.03	-0.15++	0.16++
	432	432	432	252	288	252	288	432	432
	0.22++	-0.36++	0.22++	0.00	-0.03	0.11	0.08	0.31++	0.17++
	468	468	468	252	288	252	288	468	432
	0.48++	-0.11+	-0.03	-0.02	0.27++	0.02	0.35++	0.38++	0.11+
	396	396	396	252	288	252	288	396	360
	0.45++	-0.18++	0.09	0.46++	0.35++	0.29++	0.29++	-0.01	0.07
	432	432	432	252	288	252	288	432	396
	-0.09	-0.33++	0.07	-0.00	-0.00	-0.06	0.02	-0.02	0.22++
	360	360	360	252	288	252	288	360	360

TABLE 20 COMBINED ANALYSIS OF MESOAMERICAN SITES IN ZONE IV FOR ISVEX-2

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	FCDS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
BOSSIER	1.17	184.23	32.42	17.42	2.78
JUPITEE	1.06	167.44	41.12	18.49	2.55
DAVIS	1.54	171.54	29.05	17.97	2.65
WILLIAMS	1.02	170.92	24.58	19.46	2.45
CLARK 63	1.10	181.69	23.64	18.17	2.73
HAMPTON 266A	1.33	177.10	27.16	20.35	3.25
FRAGG	1.23	175.75	25.83	18.37	3.13
FORREST	1.17	154.08	34.05	15.66	3.00
HILL	1.46	173.98	26.32	16.17	2.48
GRAND MEAN	1.23	172.97	29.35	18.01	2.78
NUMBER EXPERIMENTS CONTRIBUTING	12	13	11	12	10
STANDARD ERROR OF VARIETY MEAN	0.13	5.34	2.10	0.46	0.24
COEFFICIENT OF VARIATION	73.63%	22.26%	47.36%	17.73%	54.67%
5% LSD VARIETY MEANS (*****NS)	*****	14.99	5.90	1.30	*****
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROB=-.05, +- - PROB=.01)					
YIELD KG/HA	0.03	0.22++	0.48++	0.45++	-0.09
DAYS TO FLOWER	432	468	396	432	360
	-0.22++	-0.36++	-0.11+	-0.18++	-0.33++
DAYS TO MATURITY	432	468	396	432	360
	0.07	0.22++	-0.03	0.09	0.07
NODULE NUMBER 1	432	468	396	432	360
	-0.13+	0.00	-0.02	0.46++	-0.00
NODULE NUMBER 2	252	252	252	252	252
	-0.06	-0.03	0.27++	0.35++	-0.00
NODULE WEIGHT 1	288	288	288	288	288
	-0.01	0.11	0.02	0.29++	-0.06
NODULE WEIGHT 2	252	252	252	252	252
	-0.03	0.08	0.35++	0.29++	0.02
PLANT HEIGHT	288	288	288	288	288
	-0.15++	0.31++	0.38++	-0.01	-0.02
LODGING	432	468	396	432	360
	0.16++	0.17++	0.11+	0.07	0.22++
SHATTER	432	432	360	396	360
	1.00	0.09	-0.01	0.11+	0.18++
PLANTS HARVEST	432	432	360	396	360
	0.09	1.00	-0.13++	-0.14++	0.23++
FODS PER PLANT	432	468	396	432	360
	-0.01	-0.13++	1.00	-0.11+	-0.13+
100 SEED WEIGHT	360	396	396	396	360
	0.11+	-0.14++	-0.11+	1.00	0.02
QUALITY OF SEED	396	432	396	432	360
	0.18++	0.23++	-0.13+	0.02	1.00
	360	360	360	360	360

TABLE 21 COMBINED ANALYSIS OF SITES IN ZONE I FOR ISVEX-2

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
GRAND MEAN	2320.24	29.89	93.73	157.12	248.18	0.97	2.43	42.75	1.25
NUMBER EXPERIMENTS CONTRIBUTING	28	27	27	23	22	23	22	28	28
STANDARD ERROR OF VARIETY MEAN	76.34	0.39	0.88	8.66	15.21	0.09	0.21	1.12	0.08
COEFFICIENT OF VARIATION	34.82	13.51%	9.77%	52.90%	57.49%	85.60%	82.44%	27.84%	65.24%
5% LSD VARIETY MEANS (*****=NS)	212.80	1.08	2.46	24.18	42.46	0.24	*****	3.13	0.21
CORRELATIONS AND NUMBER OF OBSERVATIONS									
(+ - PROB=.05, ** - PROB=.01)									
YIELD	1.00	0.08+	0.11++	0.08+	0.20++	0.18++	0.12++	0.28++	0.14++
DAYS TO FLOWER	1008	972	972	828	792	828	792	1008	1008
DAYS TO MATURITY	0.08+	1.00	0.57++	0.10++	0.08+	0.20++	0.13++	0.41++	0.13++
NODULE NUMBER 1	0.11++	0.57++	1.00	0.22++	0.20++	0.52++	0.29++	0.34++	0.20++
NODULE NUMBER 2	0.08+	0.10++	0.22++	0.792	0.57++	0.53++	0.34++	0.09++	0.01
NODULE WEIGHT 1	0.08+	0.20++	0.52++	0.57++	1.00	0.25++	0.54++	0.13++	0.13++
NODULE WEIGHT 2	0.12++	0.13++	0.29++	0.34++	0.54++	0.54++	0.54++	0.26++	-0.05
PLANT HEIGHT	0.28++	0.41++	0.34++	0.09++	0.13++	0.26++	0.20++	0.20++	-0.02
LODGING	0.14++	0.18++	0.20++	0.01	0.13++	-0.05	-0.02	0.37++	792
SHATTER	1008	972	972	828	792	828	792	1008	1008
PLANTS	-0.04	0.03	-0.01	0.08+	-0.03	0.04	-0.02	-0.03	0.03
HARVEST	0.23++	0.01	-0.01	0.13++	-0.03	0.07+	0.20++	0.18++	0.14++
FODS PER PLANT	0.26++	0.31++	0.30++	-0.13++	0.12++	0.03	0.21++	0.34++	0.10++
100 SEED WEIGHT	0.37++	-0.10++	0.15++	0.26++	0.21++	0.23++	0.12++	-0.05++	0.07+
QUALITY OF SEED	-0.22++	0.15++	0.26++	0.00	0.00	0.07+	-0.04	-0.06	0.17++
	864	828	828	792	756	792	756	864	864

TABLE 21 COMBINED ANALYSIS OF SITES IN ZONE I FOR ISVEX-2

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	FODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
BCSSIER	1.01	190.96	29.73	17.91	1.91
JUPITER	1.03	183.01	37.68	19.37	2.18
DAVIS	1.02	181.91	29.14	19.23	1.93
ERAGG	1.02	189.41	25.85	19.47	2.23
HAMPTON 266A	1.01	180.57	25.49	21.18	2.16
WILLIAMS	1.11	184.49	21.93	20.45	1.98
FORREST	1.00	175.78	29.70	16.21	2.19
CLARK 63	1.04	190.27	23.78	18.45	2.31
HILL	1.05	173.28	25.04	17.19	1.89
GRAND MEAN	1.03	183.30	27.59	18.83	2.08
NUMBER EXPERIMENTS COUNTERTEING	27	27	25	26	24
STANDARD ERROR OF VARIETY MEAN	0.04	3.82	0.98	0.30	0.13
COEFFICIENT OF VARIATION	40.41%	21.67%	35.51%	16.38%	59.09%
5% LSD VARIETY MEANS (*****=NS)	*****	10.66	2.73	0.84	*****
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROB=.05, +- - PROB=.01)					
YIELD KG/HA	-0.04	0.23++	0.26++	0.37++	-0.22++
DAYS TO FLOWER	0.03	0.01	0.31++	0.36	864
DAYS TO MATURITY	-0.01	0.01	0.30++	0.15++	0.15++
NODULE NUMBER 1	0.08+	0.13++	0.26++	0.26++	0.26++
NODULE NUMBER 2	-0.03	-0.03	0.12++	0.21++	0.00
NODULE WEIGHT 1	0.04	0.07+	0.03	0.23++	0.07+
NODULE WEIGHT 2	-0.02	-0.20++	0.21++	0.12++	-0.04
PLANT	0.03	0.18++	0.34++	0.09++	-0.06
LODGING	0.03	0.14++	0.10++	0.07+	0.17++
SHATTER	1.00	0.07+	-0.09+	0.09++	0.05
PLANTS HARVEST	0.07+	1.00	-0.38++	-0.09++	-0.02
FODS PER PLANT	-0.09+	-0.38++	1.00	-0.07+	0.01
100 SEED WEIGHT	0.09++	-0.09++	-0.07+	1.00	0.06
QUALITY OF SEED	0.05	-0.02	0.01	0.06	1.00
	828	864	864	864	864

TABLE 22 COMBINED ANALYSIS OF SITES IN ZONE IV FOR ISVEX-2

VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
JUEITER	2362.04	41.28	117.75	162.50	347.19	0.95	2.98	69.63	1.81
BOSSIER	2309.79	39.91	104.85	219.40	408.75	1.64	3.75	52.67	1.70
DAVIS	2151.73	35.25	100.79	182.98	333.96	1.37	2.87	37.01	1.11
IMPROVED PELICAN	2125.59	39.87	106.40	175.81	344.46	0.93	2.73	77.24	2.08
HARDEE	2046.82	37.31	109.00	168.19	289.23	1.08	2.51	35.17	1.11
WILLIAMS	2018.22	30.09	89.24	200.15	240.75	1.03	2.14	44.95	1.42
CLARK 63	1934.92	29.57	91.44	175.38	211.92	0.89	2.41	49.22	1.75
FORREST	1903.83	33.81	98.40	142.29	294.85	0.72	2.27	35.59	1.11
BRAGG	1885.21	32.57	102.79	157.83	287.90	1.03	2.24	36.54	1.09
HAMPTON 266A	1857.66	32.28	100.29	221.02	293.65	1.00	2.46	34.91	1.09
HILL	1804.60	35.09	93.71	149.38	229.77	0.84	2.04	36.43	1.33
TRACY	1612.66	31.21	90.81	202.73	265.75	1.22	2.80	31.98	1.20
GRAND MEAN	2001.09	34.85	100.46	179.80	295.68	1.06	2.60	45.11	1.40
NUMBER EXPERIMENTS CONTRIBUTING	18	17	17	12	12	11	11	17	16
STANDARD ERROR OF VARIETY MEAN	113.58	0.68	2.51	15.28	47.25	0.16	0.29	2.01	0.10
COEFFICIENT OF VARIATION	48.16%	16.15%	20.60%	58.87%	110.72%	100.73%	73.97%	36.71%	59.82%
5% LSD VARIETY MEANS (*****NS)	316.87	1.90	7.00	42.78	*****	0.45	0.81	5.61	0.29

CORRELATIONS AND NUMBER OF OBSERVATIONS

(+ - PROB=.05, ++ - PROB=.01)

YIELD	1.00	0.04	0.19++	-0.37++	-0.09+	-0.04	0.23++	0.39++	0.16++
DAYS TO FLOWER	864	816	816	576	576	528	528	816	768
DAYS TO MATURITY	0.04	1.00	0.52++	-0.04	0.04	-0.05	-0.06	0.20++	-0.02
NODULE NUMBER 1	816	816	816	576	576	528	528	816	768
NODULE NUMBER 2	0.19++	0.52++	1.00	-0.19++	-0.10+	-0.18++	-0.19++	0.16++	0.17++
NODULE WEIGHT 1	816	816	816	576	576	528	528	816	768
NODULE WEIGHT 2	-0.37++	-0.04	-0.19++	1.00	0.42++	0.54++	0.27++	0.04	-0.01
PLANT HEIGHT	576	576	576	576	576	528	528	576	576
LODGING	-0.09+	0.04	0.10+	0.42++	1.00	0.31++	0.53++	0.11++	-0.00
SHATTER	576	576	576	576	576	528	528	576	576
PLANTS HARVEST	0.23++	0.20++	0.16++	0.04	0.11++	0.03	0.19++	1.00	0.47++
FOODS PER PLANT	816	816	816	576	576	528	528	816	768
100 SEED WEIGHT	0.16++	-0.02	0.17++	-0.01	-0.00	0.07	0.22++	0.47++	1.00
QUALITY OF SEED	-0.01	-0.11++	0.19++	-0.17++	-0.12++	-0.04	-0.07	-0.18++	0.11++
	768	768	768	576	576	528	528	768	768
	0.07+	-0.17++	0.03	0.11++	0.09+	-0.11+	-0.15++	0.19++	0.15++
	816	816	816	576	576	528	528	816	768
	0.52++	0.18++	0.11++	-0.10+	-0.02	0.09+	0.22++	0.43++	0.14++
	816	816	816	576	576	528	528	816	768
	0.41++	0.08+	0.30++	-0.35++	-0.13++	-0.14++	0.08	-0.15++	0.05
	816	816	816	576	576	528	528	816	768
	0.02	-0.23++	0.17++	-0.06	-0.13++	-0.06	-0.03	-0.07+	0.09+
	768	768	768	576	576	528	528	768	768

TABLE 22 COMBINED ANALYSIS OF SITES IN ZONE IV FOR ISVEX-2

VARIETY OR CROSS	SHAFTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
JUPIER	1.08	163.31	44.91	17.88	2.67
BOSSIER	1.16	181.06	32.87	16.45	2.38
DAVIS	1.48	166.62	29.68	17.49	2.69
IMPROVED PELICAN	1.14	165.47	44.26	13.84	2.14
HARDEF	1.42	133.57	41.10	17.79	2.70
WILLIAMS	1.03	164.94	26.22	18.85	2.23
CLARK 63	1.09	170.57	25.71	17.40	2.59
FORREST	1.23	146.97	35.72	15.53	2.80
BRAGG	1.28	168.94	25.80	17.90	3.03
HAMPTON 266A	1.44	171.85	26.00	19.22	3.03
HILL	1.44	186.51	27.37	15.81	2.31
TRACY	1.33	152.24	26.00	18.33	2.89
GRAND MEAN	1.26	164.34	32.14	17.21	2.62
NUMBER EXPERIMENTS CONTRIBUTING	16	17	17	17	16
STANDARD ERROR OF VARIETY MEAN	0.10	5.58	2.15	0.35	0.18
COEFFICIENT OF VARIATION	62.68%	28.02%	55.06%	16.69%	55.43%
5% LSD VARIETY MEANS (*****=NS)	0.28	15.58	5.99	0.97	0.51
CORRELATIONS AND NUMBER OF OBSERVATIONS					
(+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	-0.01	0.07+	0.52++	0.41++	0.02
DAYS TO FLOWER	768	816	816	816	768
DAYS TO MATURITY	-0.11++	-0.17++	0.18++	0.08+	-0.23++
NODULE NUMBER 1	768	816	816	816	768
NODULE NUMBER 2	0.19++	0.03	0.11++	0.30++	0.17++
NODULE WEIGHT 1	768	816	816	816	768
NODULE WEIGHT 2	-0.17++	0.11++	-0.10+	-0.35++	-0.06
PLANT HEIGHT	576	576	576	576	576
LOGGING	-0.12++	0.09+	-0.02	-0.13++	-0.13++
SHATTER	576	576	576	576	576
PLANTS HARVEST	-0.04	-0.11+	0.09+	-0.14++	-0.06
PODS PER PLANT	528	528	528	528	528
100 SEED WEIGHT	-0.07	-0.15++	0.22++	0.08	-0.03
QUALITY OF SEED	528	528	528	528	528
	-0.18++	0.19++	0.43++	-0.15++	-0.07+
	768	816	816	816	768
	0.11++	0.15++	0.14++	0.05	0.09+
	768	768	768	768	768
	1.00	0.00	-0.08+	0.21++	0.17++
	768	768	768	768	768
	0.00	1.00	-0.36++	-0.21++	0.02
	768	816	816	816	768
	-0.08+	-0.36++	1.00	0.02	-0.04
	768	816	816	816	768
	0.21++	-0.21++	0.02	1.00	0.20++
	768	816	816	816	768
	0.17++	0.02	-0.04	0.20++	1.00
	768	768	768	768	768

TABLE 23 COMBINED ANALYSIS OF SITFS IN ZCNE VII FCR ISVEX-2

VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
FCRREST	1.00	115.25	45.58	10.85	1.88
TRACY	1.00	129.40	43.09	14.49	1.75
DAVIS	1.00	131.20	43.92	12.90	1.88
WILLIAMS	1.00	130.85	29.83	12.75	2.25
HILL	1.00	111.60	42.29	12.33	2.25
CLARK 63	1.00	139.30	31.52	12.85	2.63
BONUS	1.00	136.90	32.37	14.07	2.63
GRAND MEAN	1.00	127.79	38.37	12.89	2.18
NUMBER EXPERIMENTS CONTRIBUTING	1	5	4	3	2
STANDARD ERROR OF VARIETY MEAN	0.00	10.06	4.31	0.41	0.63
COEFFICIENT OF VARIATION	0.00%	35.21%	44.96%	10.98%	82.14%
5% LSD VARIETY MEANS (*****=NS)	0.00	*****	*****	1.26	*****
CORRELATICS AND NUMBER OF OBSERVATIONS (+ - PROB=.05, ++ - PROB=.01)					
YIELD KG/HA	0.00	0.18+	0.61++	0.65++	0.48++
DAYS TO FLOWER	0.00	-0.03	0.57++	0.24+	0.05
DAYS TO MATURITY	0.00	0.14	0.51++	0.58++	0.35++
NODULE NUMBER 1	0.00	0.17	-0.20	-0.32+	-0.38++
NODULE NUMBER 2	0.00	0.19	-0.38++	-0.53++	-0.48++
NODULE WEIGHT 1	0.00	-0.12	0.46++	0.75++	0.48++
NODULE WEIGHT 2	0.00	-0.08	0.58++	0.76++	0.47++
PLANT HEIGHT	0.00	0.38++	0.35++	0.66++	0.61++
LODGING	0.00	0.00	0.00	0.00	0.00
SHATTER	1.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	0.00	1.00	-0.29++	0.07	-0.12
PODS PER PLANT	0.00	-0.29++	1.00	0.49++	0.27+
100 SEED WEIGHT	0.00	0.07	0.49++	1.00	0.51++
QUALITY OF SEED	0.00	-0.12	0.27+	0.51++	1.00
	28	56	56	56	56

TABLE 24 EXPERIMENT 101 YEAR 1974

REGION - AFRICA COUNTRY - ANGOLA
 SITE - NOVA LISBOA COOPERATOR - A. SILVA, J. EVANGELISTA
 LATITUDE - 12 DEG. 44 MIN. S ELEVATION - 1700 M
 DATE PLANTED - NOVEMBER 8, 1974 DATE HARVESTED - MARCH, 1975
 SOIL TYPE - SAND 61%, SILT 6%, CLAY 33%, PH 4.99
 FERTILIZER USED (KG/HA) - P 36.6, K 51.0
 AMOUNT OF MOISTURE - 885 MM
 LOCAL VARIETIES - C8013, C8014E

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LODGING
6	DAVIS	1805.65	65.00	134.00	523.75	474.25	3.38	4.20	32.75	1.00
8	FORREST	1757.02	58.00	134.00	0.00	0.00	0.00	0.00	30.50	1.00
9	HILL	1716.47	58.00	134.00	0.00	0.00	0.00	0.00	29.25	1.00
4	BOSSIER	1580.48	51.00	134.00	523.50	751.75	2.33	3.94	47.75	1.00
14	C8014E	1540.85	64.00	129.00	669.50	468.75	3.58	3.08	54.25	2.00
13	C8013	1484.55	58.00	129.00	540.25	454.00	2.69	3.10	48.50	2.00
3	IMPROVED PELICAN	1464.79	66.00	144.00	527.00	508.50	3.02	3.74	61.00	1.00
12	WILLIAMS	1332.10	48.00	113.00	636.00	614.25	2.22	3.88	21.75	1.00
10	CLARK 63	1261.67	48.00	113.00	472.25	459.25	2.32	3.85	23.75	1.00
7	TRACY	998.49	50.00	113.00	471.75	419.50	3.01	4.17	21.75	1.00
11	BONUS	911.35	48.00	129.00	465.00	464.75	2.22	4.43	25.75	1.00
5	BRAGG	864.17	51.00	134.00	485.75	566.75	2.75	3.76	31.00	1.00
1	JUPITER	801.74	84.00	157.00	587.25	477.75	3.89	3.80	83.00	2.00
2	HAMPTON 266A	657.13	50.00	144.00	677.75	597.00	3.24	4.85	29.50	1.00
GRAND MEAN										
		1298.32	57.07	131.50	469.98	446.89	2.47	3.34	38.61	1.21
STANDARD ERROR OF A VARIETY MEAN		88.47	0.00	0.00	35.73	31.90	0.18	0.30	1.53	0.00
COEFFICIENT OF VARIATION		13.63%	0.00%	0.00%	15.21%	14.28%	14.68%	18.25%	7.91%	0.00%
5% LSD VARIETY MEANS (*****=NS)		253.08	0.00	0.00	102.21	91.26	0.52	0.87	4.37	0.00
C O R R E L A T I O N S										
		(+ - PROB=.05			+ - PROB=.01)					
YIELD	KG/HA	1.00	0.11	-0.15	-0.41++	-0.33+	-0.43++	-0.48++	0.01	-0.03
DAYS TO FLOWER	0.11	1.00	0.71++	0.04	0.04	-0.15	0.31+	-0.13	0.85++	0.62++
DAYS TO MATURITY	-0.15	0.71++	1.00	0.01	0.01	-0.02	0.19	-0.05	0.30+	0.30+
MODULE NUMBER 1	-0.41++	0.04	0.01	1.00	0.83++	0.83++	0.88++	0.80++	0.25	0.32+
MODULE NUMBER 2	-0.33+	-0.15	-0.01	0.83++	1.00	0.69++	0.69++	0.85++	0.16	0.05
MODULE WEIGHT 1	-0.43++	0.31+	0.19	0.88++	0.69++	0.69++	1.00	0.73++	0.41++	0.41++
MODULE WEIGHT 2	-0.48++	-0.13	-0.05	0.80++	0.85++	0.85++	0.73++	1.00	0.06	-0.01
PLANT HEIGHT	0.01	0.85++	0.71++	0.25	0.25	0.16	0.43++	0.06	1.00	0.69++
LODGING	-0.03	0.62++	0.30+	0.32+	0.32+	0.05	0.41++	-0.01	0.69++	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	-0.00	0.20	0.31+	0.42++	0.42++	0.41++	0.41++	0.33+	0.41++	0.39++
PODS PER PLANT	0.59++	0.30+	0.24	-0.35++	-0.34+	-0.26	-0.26	-0.42++	0.29+	-0.01
100 SEED WEIGHT	-0.28+	-0.06	0.20	0.16	0.16	0.16	0.15	0.15	-0.20	-0.12
QUALITY OF SEED	-0.08	0.16	0.14	0.01	-0.01	-0.01	0.07	0.05	0.33+	0.31+

TABLE 24 EXPERIMENT 101 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
6	DAVIS	2.00	191.50	20.25	21.30	2.00	46.1	19.0
8	FORREST	2.00	163.50	21.25	19.20	2.00	43.9	18.2
9	HILL	2.00	159.25	25.25	17.58	3.00	45.0	17.1
4	BOSSIER	2.00	192.50	16.00	17.88	3.00	47.4	17.3
14	C8014E	2.00	196.75	19.50	18.38	3.00	47.7	17.3
13	C8013	2.00	195.75	19.75	16.55	3.00	46.5	16.4
3	IMPROVED PELICAN	2.00	178.75	33.00	14.55	3.00	49.4	16.8
12	WILLIAMS	2.00	169.75	13.25	19.00	2.00	45.8	19.2
10	CLARK 63	2.00	167.50	13.00	18.00	2.00	46.3	19.6
7	TRACY	2.00	154.75	10.25	16.93	3.00	47.7	15.1
11	BONUS	2.00	192.00	17.00	17.33	4.00	50.0	16.6
5	BRAGG	2.00	186.00	15.75	21.58	2.00	46.7	18.3
1	JUPITER	2.00	185.75	12.75	19.33	3.00	48.0	16.9
2	HAMPTON 266A	2.00	182.50	8.25	23.13	2.00	45.4	17.3
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(* - PROB=.05 +- - PROB=.01)								
YIELD	KG/HA	0.00	-0.00	0.59++	-0.28+	-0.08		
DAYS TO FLOWER		0.00	0.20	0.30+	-0.06	0.16		
DAYS TO MATURITY		0.00	0.31+	0.24	0.20	0.14		
NODULE NUMBER 1		0.00	0.42++	-0.35++	0.16	0.01		
NODULE NUMBER 2		0.00	0.41++	-0.34+	0.16	-0.01		
NODULE WEIGHT 1		0.00	0.41++	-0.26	0.15	0.07		
NODULE WEIGHT 2		0.00	0.33+	-0.42++	0.15	0.05		
PLANT HEIGHT		0.00	0.41++	0.29+	-0.20	0.33+		
LODGING		0.00	0.39++	-0.01	-0.12	0.31+		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	0.04	0.10	0.20		
PODS PER PLANT		0.00	0.04	1.00	-0.47++	0.22		
100 SEED WEIGHT		0.00	0.10	-0.47++	1.00	-0.59++		
QUALITY OF SEED		0.00	0.20	0.22	-0.59++	1.00		
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(* - PROB=.05 +- - PROB=.01)								
YIELD	KG/HA	0.00	-0.00	0.59++	-0.28+	-0.08		
DAYS TO FLOWER		0.00	0.20	0.30+	-0.06	0.16		
DAYS TO MATURITY		0.00	0.31+	0.24	0.20	0.14		
NODULE NUMBER 1		0.00	0.42++	-0.35++	0.16	0.01		
NODULE NUMBER 2		0.00	0.41++	-0.34+	0.16	-0.01		
NODULE WEIGHT 1		0.00	0.41++	-0.26	0.15	0.07		
NODULE WEIGHT 2		0.00	0.33+	-0.42++	0.15	0.05		
PLANT HEIGHT		0.00	0.41++	0.29+	-0.20	0.33+		
LODGING		0.00	0.39++	-0.01	-0.12	0.31+		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	0.04	0.10	0.20		
PODS PER PLANT		0.00	0.04	1.00	-0.47++	0.22		
100 SEED WEIGHT		0.00	0.10	-0.47++	1.00	-0.59++		
QUALITY OF SEED		0.00	0.20	0.22	-0.59++	1.00		

TABLE 25 EXPERIMENT 102 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
5	BOSSIER	1.00	72.75	7.75	17.00	1.25	39.4	22.0
10	HILL	1.25	73.75	9.50	16.50	1.50	38.8	21.0
4	IMPROVED PELICAN	1.25	69.50	7.75	15.50	1.75	41.3	20.4
9	FORREST	1.00	66.25	8.25	17.75	1.25	38.8	21.0
2	HAMPTON 266A	1.25	66.25	6.25	19.50	1.00	38.8	21.1
3	HARDEE	1.50	54.75	7.50	16.75	1.00	37.8	22.2
6	BRAGG	1.00	61.75	7.50	17.50	1.00	40.3	19.0
8	TRACY	1.50	67.25	7.50	17.75	1.50	40.7	19.8
13	WILLIAMS	1.25	59.75	5.50	17.25	1.00	39.5	21.4
7	DAVIS	1.25	52.50	6.75	18.50	1.25	39.6	20.7
11	CLARK 63	1.50	66.00	5.50	16.50	1.50	39.9	21.3
1	JUPITER	1.00	67.75	10.00	20.50	2.00	39.5	20.9
14	CALLAND	1.25	52.25	5.75	17.50	1.75	39.7	20.8
12	BONUS	1.00	58.50	6.50	18.50	1.75	42.5	19.9
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.21	63.50	7.29	17.64	1.39	39.8	20.8
COEFFICIENT OF VARIATION		0.22	5.33	0.90	0.93	0.22		
5% LSD VARIETY MEANS (*****=NS)		36.11%	16.78%	24.80%	10.51%	31.03%		
		*****	*****	2.58	*****	0.62		
C O R R E L A T I O N S								
		(+ - PROB=-.05			++ - PROB=-.01)			
YIELD	KG/HA	-0.05	0.31+	0.32+	-0.18	-0.10		
DAYS TO FLOWER		-0.15	0.21	0.45++	0.21	0.38++		
DAYS TO MATURITY		-0.15	0.06	0.34+	0.38++	0.37++		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT	HEIGHT	-0.17	0.04	0.69++	0.00	0.00		
LODGING		0.08	0.11	0.05	-0.16	0.19		
SHATTER		1.00	0.05	-0.14	-0.06	-0.16		
PLANTS	HARVEST	0.05	1.00	0.17	-0.06	0.29+		
PODS PER PLANT		-0.14	0.17	1.00	0.08	0.08		
100 SEED WEIGHT		-0.06	-0.16	0.08	1.00	-0.01		
QUALITY OF SEED		0.29+	0.08	-0.01	-0.00	-0.00		

TABLE	26	EXPERIMENT	33	YEAR	1974
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REGION - AFRICA	COUNTRY - EGYPT
SITE - BAUTEEM	COOPERATOR - A. ABDEL-AZIZ
LATITUDE - 30 DEG. N	ELEVATION - 21 M
DATE PLANTED - JUNE 6, 1974	DATE HARVESTED - SEPTEMBER, 1974
SOIL TYPE - CLAY	
NUMBER OF IRRIGATIONS - 3	
SUBSTITUTE VARIETY - CLARK	

[illegible]

TABLE 26 EXPERIMENT 33 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
8	CLARK	0.00	146.75	0.00	0.00	0.60	34.9	24.8
3	FORREST	0.00	180.00	0.00	0.00	0.00	38.7	20.1
4	HILL	0.00	165.00	0.00	0.00	0.00	37.0	21.4
1	DAVIS	0.00	180.00	0.00	0.00	0.00	40.3	18.6
2	TRACY	0.00	180.00	0.00	0.00	0.00	41.5	17.6
7	WILLIAMS	0.00	165.50	0.00	0.00	0.00	37.7	23.9
6	BONUS	0.00	165.25	0.00	0.00	0.00	36.6	24.1
5	CLARK 63	0.00	170.75	0.00	0.00	0.00	31.7	26.3
GRAND MEAN								
		0.00	169.16	0.00	0.00	0.00	37.3	22.1
STANDARD ERROR OF A VARIETY MEAN								
		0.00	8.56	0.00	0.00	0.00		
COEFFICIENT OF VARIATION								
		0.00%	10.12%	0.00%	0.00%	0.00%		
5% LSD VARIETY MEANS (*****=NS)								
		0.00	*****	0.00	0.00	0.00		
C O R R E L A T I O N S								
			(+ - PROB=-.05	+* - PROB=.01) =				
	YIELD KG/HA	0.00	0.20	0.00	0.00	0.00		
	DAYS TO FLOWER	0.00	0.36+	0.00	0.00	0.00		
	DAYS TO MATURITY	0.00	0.37+	0.00	0.00	0.00		
	NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00		
	NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00		
	PLANT HEIGHT	0.00	0.30	0.00	0.00	0.00		
	LODGING	0.00	0.00	0.00	0.00	0.00		
	SHATTER	1.00	0.00	0.00	0.00	0.00		
	PLANTS HARVEST	0.00	1.00	0.00	0.00	0.00		
	PODS PER PLANT	0.00	0.00	1.00	0.00	0.00		
	100 SEED WEIGHT	0.00	0.00	0.00	1.00	0.00		
	QUALITY OF SEED	0.00	0.00	0.00	0.00	1.00		

TABLE 27

EXPERIMENT 38

YEAR 1974

REGION - AFRICA
SITE - SEDS
LATITUDE - 29 DEG. N
DATE PLANTED - MAY 21, 1974
SOIL TYPE - CLAY
NUMBER OF IRRIGATIONS - 4
SUBSTITUTE VARIETIES - CLARK, HAMPTON

COUNTRY - EGYPT
COOPERATOR - A. ABDEL-AZIZ

DATE HARVESTED - SEPTEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
7	TRACY	1812.86	59.00	139.75	102.75	154.25	2.34	4.18	106.25	0.00
1	HAMPTON 266A	1762.85	70.00	153.00	113.75	97.50	2.95	2.60	95.00	0.00
6	DAVIS	1721.18	49.00	140.50	87.75	203.75	2.03	4.28	107.25	0.00
14	HAMPTON	1529.47	65.00	154.25	68.00	289.25	2.40	4.80	107.25	0.00
4	BOSSIER	1496.13	65.00	153.50	81.75	88.75	1.64	2.30	177.50	0.00
5	BRAGG	1254.42	54.00	140.00	64.75	111.25	0.89	1.90	111.25	0.00
8	FORREST	1228.16	48.00	110.00	31.25	85.75	0.46	2.93	87.25	0.00
9	HILL	1141.89	55.00	110.75	40.75	86.00	1.01	2.18	65.75	0.00
10	CLARK 63	1104.39	34.75	97.50	106.25	126.75	1.23	2.31	72.00	0.00
11	BONUS	1035.62	32.00	97.00	154.75	156.00	2.02	3.55	65.50	0.00
12	WILLIAMS	1025.20	30.00	90.25	69.00	75.25	0.98	2.03	54.25	0.00
2	HARDEE	954.36	95.00	154.75	80.75	104.00	1.70	2.03	105.00	0.00
3	IMPROVED PELICAN	795.99	98.00	153.75	138.50	92.25	2.28	1.78	103.25	0.00
13	CLARK	787.66	37.00	102.00	83.50	66.75	2.96	1.65	84.50	0.00
	GRAND MEAN	1260.73	56.55	128.36	87.39	124.11	1.78	2.75	95.86	0.00
	STANDARD ERROR OF A VARIETY MEAN	191.38	0.07	0.51	21.58	43.92	0.76	0.78	6.05	0.00
	COEFFICIENT OF VARIATION	30.36%	0.24%	0.80%	49.40%	70.78%	85.45%	56.50%	12.63%	0.00%
	5% LSD VARIETY MEANS (*****=NS)	547.45	0.19	1.46	61.74	*****	*****	*****	17.32	0.00
C O R R E L A T I O N S										
	YIELD	1.00								
	DAYS TO FLOWER	0.02	0.02	0.29+	0.28+	0.40++	0.22	0.49++	0.27+	0.00
	DAYS TO MATURITY	0.02	1.00	0.84++	0.08	0.00	0.13	-0.07	0.46++	0.00
	NODULE NUMBER 1	0.29+	0.84++	1.00	0.05	0.19	0.19	0.13	0.71++	0.00
	NODULE NUMBER 2	0.28+	0.08	0.05	1.00	0.29+	0.45++	0.26	0.05	0.00
	NODULE WEIGHT 1	0.40++	0.00	0.19	0.29+	1.00	0.25	0.78++	0.11	0.00
	NODULE WEIGHT 2	0.22	0.13	0.19	0.45++	0.25	1.00	0.18	0.01	0.00
	PLANT HEIGHT	0.49++	-0.07	0.13	0.26	0.78++	1.00	0.10	0.10	0.00
	LODGING	0.27+	0.46++	0.71++	0.05	0.11	0.01	1.00	1.00	0.00
	SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PLANTS HARVEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PODS PER 100 SEED	0.01	-0.06	-0.13	-0.09	-0.13	-0.03	-0.02	0.15	0.00
	QUALITY OF SEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(+ - PROB=.05 ++ - PROB=.01)

TABLE 27 EXPERIMENT 38 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
7	TRACY	0.00	117.50	41.35	0.00	0.00	40.1	20.2
1	HAMPTON 266A	0.00	132.25	54.73	0.00	0.00	37.4	23.2
6	DAVIS	0.00	134.75	35.55	0.00	0.00	36.4	22.4
14	HAMPTON	0.00	97.75	36.80	0.00	0.00	36.0	22.9
4	BOSSIER	0.00	142.00	46.75	0.00	0.00	36.4	23.5
5	BRAGG	0.00	127.25	43.75	0.00	0.00	34.8	24.7
8	FORREST	0.00	104.00	46.90	0.00	0.00	35.5	23.2
9	HILL	0.00	86.00	57.55	0.00	0.00	35.0	23.5
10	CLARK 63	0.00	133.50	40.03	0.00	0.00	36.1	24.2
11	BONUS	0.00	136.25	32.05	0.00	0.00	37.3	24.6
12	WILLIAMS	0.00	157.25	33.40	0.00	0.00	36.8	24.2
2	HARDEE	0.00	108.25	42.08	0.00	0.00	36.9	22.8
3	IMPROVED PELICAN	0.00	102.25	63.80	0.00	0.00	41.6	20.4
13	CLARK	0.00	102.00	45.28	0.00	0.00	37.5	24.4
	GRAND MEAN	0.00	120.07	44.29	0.00	0.00	37.0	23.2
	STANDARD ERROR OF A VARIETY MEAN	0.00	10.22	5.30	0.00	0.00		
	COEFFICIENT OF VARIATION	0.00%	17.03%	23.95%	0.00%	0.00%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	29.24	15.17	0.00	0.00		
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)								
	YIELD KG/HA	0.00	-0.06	0.01	0.00	0.00		
	DAYS TO FLOWER	0.00	-0.30+	0.41++	0.00	0.00		
	DAYS TO MATURITY	0.00	-0.13	0.24	0.00	0.00		
	NODULE NUMBER 1	0.00	-0.09	0.13	0.00	0.00		
	NODULE NUMBER 2	0.00	-0.13	-0.05	0.00	0.00		
	NODULE WEIGHT 1	0.00	-0.03	0.11	0.00	0.00		
	NODULE WEIGHT 2	0.00	-0.02	-0.14	0.00	0.00		
	PLANT HEIGHT	0.00	0.02	0.15	0.00	0.00		
	LODGING	0.00	0.00	0.00	0.00	0.00		
	SHATTER	1.00	0.00	0.00	0.00	0.00		
	PLANTS HARVEST	0.00	1.00	-0.47++	0.00	0.00		
	PODS PER PLANT	0.00	-0.47++	1.00	0.00	0.00		
	100 SEED WEIGHT	0.00	0.00	0.00	1.00	0.00		
	QUALITY OF SEED	0.00	0.00	0.00	0.00	1.00		

TABLE 28 EXPERIMENT 30 YEAR 1974

REGION - AFRICA

SITE - AWASSA

LATITUDE - 7 DEG. N

DATE PLANTED - JUNE 12, 1974

SOIL TYPE - SAND 37.1%, SILT 33.4%, CLAY 15.2%, PH 6.1

FERTILIZER USED (KG/HA) - N 18.0, P 46.0

AMOUNT OF MOISTURE - 541 MM

COUNTRY - ETHIOPIA

COOPERATOR - AWASSA

ELEVATION - 1700 M

DATE HARVESTED - OCTOBER, 1974

FERTILIZER USED (KG/HA) - N 18.0, P 46.0

AMOUNT OF MOISTURE - 541 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
7	DAVIS	3261.07	68.00	141.00	120.00	300.00	0.00	0.00	83.75	1.00
5	BOSSIER	2860.99	68.00	152.00	235.00	300.00	0.00	0.00	86.25	1.00
3	HARDEE	2450.49	72.00	152.00	227.50	385.00	0.00	0.00	87.50	1.00
10	HILL	2244.20	68.00	138.00	122.50	350.00	0.00	0.00	81.25	1.00
13	WILLIAMS	2129.59	52.00	111.00	295.00	307.50	0.00	0.00	50.00	1.00
15	SEMME	2125.42	57.00	133.00	135.00	197.50	0.00	0.00	57.50	1.00
9	FORREST	1950.39	61.00	147.00	197.50	290.00	0.00	0.00	82.50	1.00
11	CLARK 63	1829.53	52.00	111.00	290.00	280.00	0.00	0.00	50.00	1.00
8	TRACY	1739.93	56.00	111.00	185.00	267.50	0.00	0.00	48.75	1.00
6	BRAGG	1721.18	59.00	138.00	167.50	320.00	0.00	0.00	67.50	1.00
14	CALLAND	1679.50	54.00	119.00	177.50	182.50	0.00	0.00	51.25	1.00
2	HAMPTON 266A	1466.96	63.00	147.00	277.50	432.50	0.00	0.00	68.75	1.00
12	BONUS	1379.44	52.00	125.00	307.50	292.50	0.00	0.00	51.25	1.00
4	IMPROVED PELICAN	645.96	92.00	173.00	172.50	227.50	0.00	0.00	111.25	2.00
1	JUPITER	227.13	92.00	194.00	147.50	262.50	0.00	0.00	121.25	2.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		1847.45	64.40	139.47	203.83	293.00	0.00	0.00	73.25	1.13
COEFFICIENT OF VARIATION		156.38	0.00	0.00	25.86	63.97	0.00	0.00	1.66	0.00
5% LSD VARIETY MEANS (*****=NS)		446.33	0.00	0.00	25.37%	43.66%	0.00%	0.00%	4.52%	0.00%
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	-0.40++	-0.39++	-0.01	0.13	0.00	0.00	-0.28+	-0.70++
DAYS TO FLOWER		-0.40++	1.00	0.93++	-0.36++	0.00	0.00	0.00	0.95++	0.86++
DAYS TO MATURITY		-0.39++	0.93++	1.00	-0.30+	0.04	0.00	0.00	0.95++	0.77++
NODULE NUMBER 1		-0.01	-0.36++	-0.30+	1.00	0.31+	0.00	0.00	-0.36++	-0.22
NODULE NUMBER 2		0.13	0.00	0.04	0.31+	1.00	0.00	0.00	0.04	-0.14
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		-0.28+	0.95++	0.95++	-0.36++	0.04	0.00	0.00	1.00	0.76++
LODGING		-0.70++	0.86++	0.77++	-0.22	-0.14	0.00	0.00	0.76++	1.00
SHATTER		-0.04	-0.18	-0.34++	-0.07	-0.05	0.00	0.00	-0.29+	-0.10
PLANTS HARVEST		0.15	-0.06	-0.06	0.34++	0.12	0.00	0.00	-0.01	0.02
PODS PER PLANT		-0.06	0.75++	0.64++	-0.19	0.07	0.00	0.00	0.70++	0.57++
100 SEED WEIGHT		0.33++	-0.82++	-0.65++	0.20	0.03	0.00	0.00	-0.75++	-0.75++
QUALITY OF SEED		-0.48++	0.46++	0.57++	-0.01	0.08	0.00	0.00	0.47++	0.52++

TABLE 28 EXPERIMENT 30 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
7	DAVIS	1.00	132.00	72.50	17.10	1.00
5	BOSSIER	1.00	137.00	84.75	17.70	2.00
3	HARDEE	1.00	116.25	68.00	15.30	1.50
10	HILL	1.00	102.25	53.50	15.90	1.00
13	WILLIAMS	1.00	138.00	40.25	18.80	2.00
15	SEMMES	1.00	113.00	35.75	18.45	1.25
9	FORREST	1.00	123.50	43.25	17.70	3.00
11	CLARK 63	1.00	130.00	36.00	17.70	1.00
8	TRACY	2.00	106.00	42.25	17.10	1.50
6	BRAGG	1.00	99.50	36.25	21.00	2.50
14	CALLAND	1.00	126.25	39.00	20.40	2.00
2	HAMPTON 266A	1.00	111.75	53.25	19.50	3.00
12	BONUS	1.00	144.25	40.75	17.80	1.00
4	IMPROVED PELICAN	1.00	125.00	109.75	12.80	3.00
1	JUPITER	1.00	120.50	69.75	13.50	3.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.07	121.68	55.00	17.38	1.92
COEFFICIENT OF VARIATION		0.00	10.51	6.16	0.17	0.15
5% LSD VARIETY MEANS (*****=NS)		0.00	17.27% *****	22.39% 17.57	1.93% 0.48	15.49% 0.42
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD	KG/HA	-0.04	0.15	-0.06	0.33++	-0.48++
DAYS TO FLOWER		-0.18	-0.06	0.75++	-0.82++	0.46++
DAYS TO MATURITY		-0.34++	-0.06	0.64++	-0.65++	0.57++
NODULE NUMBER 1		-0.07	0.34++	-0.19	0.20	-0.01
NODULE NUMBER 2		-0.05	0.12	0.07	0.03	0.08
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	-0.29+	-0.01	0.70++	-0.75++	0.47++
LODGING		-0.10	0.02	0.57++	-0.75++	0.52++
SHATTER		1.00	-0.18	-0.14	-0.03	-0.14
HARVEST		-0.18	1.00	-0.04	-0.02	-0.07
PLANTS	PLANT	-0.14	-0.04	1.00	-0.63++	0.26+
PODS PER		-0.03	-0.02	-0.63++	1.00	-0.08
100 SEED	WEIGHT	-0.14	-0.07	0.26+	-0.08	1.00
QUALITY	OF SEED					

TABLE 29

EXPERIMENT 28

YEAR 1974

REGION - AFRICA
 SITE - BAKO
 LATITUDE - 7 DEG. N
 DATE PLANTED - JUNE 26, 1974
 FERTILIZER USED (KG/HA) - N 46.0, P 18.0
 AMOUNT OF MOISTURE - 668 MM

COUNTRY - ETHIOPIA
 COOPERATOR - ABDURAHAM ALI
 ELEVATION - 1650 M
 DATE HARVESTED - NOVEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	BOSSIER	3192.30	67.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	HARDEE	3192.30	52.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	DAVIS	3129.79	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	HAMPTON 266A	2725.54	74.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	FORREST	2692.20	73.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	WILLIAMS	2592.18	55.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	HILL	2408.81	74.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	CALLAND	2104.59	54.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	CLARK 63	2025.40	55.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	SEMMES	1892.04	74.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	TRACY	1817.03	54.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	BRAGG	1612.82	60.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	IMPROVED PELICAN	1483.63	54.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	BONUS	900.18	80.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	JUPITER	441.75	78.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRAND MEAN		2147.37	64.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STANDARD ERROR OF A VARIETY MEAN		162.38	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COEFFICIENT OF VARIATION		15.12%	2.83%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5% LSD VARIETY MEANS (*****=NS)		463.43	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C O R R E L A T I O N S										
YIELD		1.00								
DAYS TO FLOWER		-0.27+	-0.27+	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.02	-0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS PER PLANT		0.31+	-0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER 100 SEED		0.47++	-0.29+	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY OF SEED		-0.31+	0.26+	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(+ - PROB=.05 ++ - PROB=.01)

TABLE 29 EXPERIMENT 28 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
5	BOSSIER	0.00	316.25	16 25	15.00	3.00	44.5	17.4
3	HARDEE	0.00	298.75	29.75	20.00	2.00	43.6	17.3
7	DAVIS	0.00	300.75	27.00	15.00	1.00	43.1	18.8
2	HAMPTON 266A	0.00	256.50	19.00	20.00	3.00	41.6	17.7
9	FORREST	0.00	261.00	32.75	15.00	4.00	41.6	16.6
13	WILLIAMS	0.00	278.00	19.00	20.00	1.00	42.6	19.7
10	HILL	0.00	204.50	26.00	15.00	2.00	41.5	17.3
14	CALLAND	0.00	285.50	21.00	20.00	3.00	42.8	19.8
11	CLARK 63	0.00	283.00	17.50	15.00	1.00	42.6	19.8
15	SEMMES	0.00	330.25	13.75	15.00	1.00	42.6	20.2
8	TRACY	0.00	279.00	16.50	15.00	4.00	43.1	16.6
6	BRAGG	0.00	311.25	12.50	20.00	3.00	42.2	18.3
4	IMPROVED PELICAN	0.00	314.50	28.00	10.00	2.00	44.8	16.5
12	BONUS	0.00	286.25	16.50	15.00	2.00	46.7	19.6
1	JUPITER	0.00	271.75	20.75	10.00	5.00	44.6	17.5
	GRAND MEAN	0.00	285.15	21.08	16.00	2.47	43.2	18.2
	STANDARD ERROR OF A VARIETY MEAN	0.00	13.43	2.67	0.00	0.00		
	COEFFICIENT OF VARIATION	0.00%	9.42%	25.34%	0.00%	0.00%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	38.32	7.62	0.00	0.00		
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)								
	YIELD KG/HA	0.00	0.02	0.31+	0.47++	-0.31+		
	DAYS TO FLOWER	0.00	-0.22	-0.10	-0.29+	0.26+		
	DAYS TO MATURITY	0.00	0.00	0.00	0.00	0.00		
	NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00		
	NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00		
	PLANT HEIGHT	0.00	0.00	0.00	0.00	0.00		
	LODGING	0.00	0.00	0.00	0.00	0.00		
	SHATTER	1.00	0.00	0.00	0.00	0.00		
	PLANTS HARVEST	0.00	1.00	-0.23	-0.03	-0.18		
	PODS PER PLANT	0.00	-0.23	1.00	-0.15	0.03		
	100 SEED WEIGHT	0.00	-0.03	-0.15	1.00	-0.20		
	QUALITY OF SEED	0.00	-0.18	0.03	-0.20	1.00		

TABLE 30 EXPERIMENT 77 YEAR 1974

REGION - AFRICA
SITE - DEBRE ZEIT
LATITUDE - 8 DEG. 38 MIN. N
DATE PLANTED - JUNE 25, 1974
SOIL TYPE - LOAM
AMOUNT OF MOISTURE - 596 MM

COUNTRY - ETHIOPIA
COOPERATOR - HSIU EXPERIMENT STATION
ELEVATION - 1850 M
DATE HARVESTED - NOVEMBER, 1974
[TWO REPLICATIONS ONLY]

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
13	WILLIAMS	2745.00	47.50	133.00	0.00	0.00	0.00	0.00	60.00	0.00
10	HILL	2380.00	66.00	131.00	0.00	0.00	0.00	0.00	80.00	0.00
11	CLARK 63	1990.00	48.00	133.00	0.00	0.00	0.00	0.00	75.00	0.00
8	TRACY	1935.00	49.00	131.00	0.00	0.00	0.00	0.00	52.50	0.00
7	DAVIS	1465.00	65.00	139.00	0.00	0.00	0.00	0.00	80.00	0.00
2	HAMPTON 266A	1310.00	56.00	136.00	0.00	0.00	0.00	0.00	82.50	0.00
14	CALLAND	1305.00	47.50	133.00	0.00	0.00	0.00	0.00	65.00	0.00
15	SEMME	1185.00	55.00	133.00	0.00	0.00	0.00	0.00	72.50	0.00
9	FORREST	1080.00	55.00	139.00	0.00	0.00	0.00	0.00	72.50	0.00
5	BOSSIER	1005.00	72.00	139.00	0.00	0.00	0.00	0.00	87.50	0.00
3	HARDEE	720.00	78.50	138.00	0.00	0.00	0.00	0.00	87.50	0.00
6	BAGG	715.00	55.00	139.00	0.00	0.00	0.00	0.00	67.50	0.00
12	BONUS	230.00	47.50	139.00	0.00	0.00	0.00	0.00	125.00	0.00
4	IMPROVED PELICAN	95.00	95.00	153.00	0.00	0.00	0.00	0.00	105.00	0.00
1	JUPITER	10.00	96.00	159.00	0.00	0.00	0.00	0.00	80.00	0.00
GRAND MEAN		1211.33	62.20	138.33	0.00	0.00	0.00	0.00	6.11	0.00
STANDARD ERROR OF A VARIETY MEAN		152.63	0.95	0.83	0.00	0.00	0.00	0.00	10.81%	0.00
COEFFICIENT OF VARIATION		17.82%	2.16%	0.85%	0.00%	0.00%	0.00%	0.00%	18.55	0.00
5% LSD VARIETY MEANS (*****=NS)		462.98	2.88	2.53	0.00	0.00	0.00	0.00		
C O R R E L A T I O N S										
YIELD		1.00	-0.57++	-0.76++	0.00	0.00	0.00	0.00	-0.62++	0.00
FLOWER		-0.57++	1.00	0.83++	0.00	0.00	0.00	0.00	0.84++	0.00
DAYS TO MATURITY		-0.76++	0.83++	1.00	0.00	0.00	0.00	0.00	0.77++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT		-0.62++	0.84++	0.77++	0.00	0.00	0.00	0.00	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.40+	-0.22	-0.30	0.00	0.00	0.00	0.00	-0.25	0.00
PLANTS PER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100 SEED		0.61++	-0.84++	-0.72++	0.00	0.00	0.00	0.00	-0.72++	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(+ - PROB=.05 ++ - PROB=.01)

TABLE 30 EXPERIMENT 77 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
13	WILLIAMS	0.00	198.00	0.00	18.25	0.00
10	HILL	0.00	205.50	0.00	9.85	0.00
11	CLARK 63	0.00	196.00	0.00	13.05	0.00
8	TRACY	0.00	177.50	0.00	14.90	0.00
7	DAVIS	0.00	176.50	0.00	13.30	0.00
2	HAMPTON 266A	0.00	184.50	0.00	13.00	0.00
14	CALLAND	0.00	187.50	0.00	14.65	0.00
15	SEMES	0.00	169.00	0.00	15.05	0.00
9	FORREST	0.00	139.00	0.00	12.70	0.00
5	BOSSIER	0.00	177.00	0.00	9.15	0.00
3	HARDEE	0.00	177.00	0.00	8.95	0.00
6	BRAGG	0.00	177.50	0.00	15.25	0.00
12	BONUS	0.00	190.50	0.00	11.35	0.00
4	IMPROVED PELICAN	0.00	168.00	0.00	7.70	0.00
1	JUPITER	0.00	174.50	0.00	5.40	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN						
COEFFICIENT OF VARIATION						
5% LSD VARIETY MEANS (*****=NS)						
C O R R E L A T I O N S						
(+ - PROB=.05)						
(+ - PROB=.01)						
YIELD	KG/HA	0.00	0.40+	0.00	0.61++	0.00
DAYS TO FLOWER		0.00	-0.22	0.00	-0.84++	0.00
DAYS TO MATURITY		0.00	-0.30	0.00	-0.72++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	-0.25	0.00	-0.72++	0.00
LOGGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.00	0.13	0.00
PODS PER	PLANT	0.00	0.00	1.00	0.00	0.00
100 SEED	WEIGHT	0.00	0.13	0.00	1.00	0.00
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00

TABLE 31 EXPERIMENT 31 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
3	HARDEE	1.00	163.00	22.25	17.50	1.00	38.3	18.2
5	BOSSIER	1.00	180.00	21.75	18.00	2.00	37.3	19.5
7	DAVIS	1.00	178.00	25.75	20.00	1.00	35.5	21.8
4	IMPROVED PELICAN	1.25	191.25	31.75	14.00	2.00	39.9	18.2
9	FORREST	1.00	168.75	18.00	20.00	1.75	38.4	18.0
10	HILL	1.25	135.50	25.75	18.00	1.75	34.7	19.8
13	WILLIAMS	1.00	176.75	12.25	21.00	1.00	41.2	19.1
1	JUPITER	3.00	161.75	20.50	16.00	3.75	39.8	18.4
2	HAMPTON 266A	1.00	169.75	16.75	20.25	2.25	39.5	18.4
15	SEMMES	1.75	175.75	14.25	19.00	1.25	39.6	19.9
6	BRAGG	1.00	166.00	15.75	21.00	1.00	41.7	18.8
12	BONUS	1.25	172.75	20.25	18.00	1.75	44.5	17.3
14	KWANKYO	2.00	168.50	16.50	20.00	2.00	40.5	18.7
11	CLARK 63	1.00	182.25	14.25	19.00	1.00	40.7	19.7
8	TRACY	1.00	148.00	14.75	18.25	2.00	41.3	16.6
	GRAND MEAN	1.30	169.20	19.37	18.67	1.70	39.5	18.8
	STANDARD ERROR OF A VARIETY MEAN	0.13	4.92	3.09	0.25	0.22		
	COEFFICIENT OF VARIATION	19.86%	5.82%	31.93%	2.63%	25.94%		
	5% LSD VARIETY MEANS (*****=NS)	0.37	14.05	8.83	0.70	0.63		
C O R R E L A T I O N S								
		(+ - PROB=.05	++ - PROB=.01)					
YIELD	KG/HA	-0.23	0.21	0.57++	-0.15	-0.07		
DAYS TO FLOWER		0.47++	0.09	0.40++	-0.69++	0.45++		
DAYS TO MATURITY		0.41++	0.03	0.44++	-0.55++	0.47++		
NODULE NUMBER 1		0.35++	-0.04	-0.06	-0.26+	0.27+		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT		0.39++	0.16	0.61++	-0.77++	0.54++		
LODGING		-0.19	-0.13	0.42++	-0.21	0.25		
SHATTER		1.00	-0.08	-0.10	-0.32+	0.58++		
HARVEST		-0.08	1.00	0.10	-0.04	-0.09		
PLANTS		-0.10	0.10	1.00	-0.46++	0.23		
PODS PER PLANT		-0.32+	-0.04	-0.46++	1.00	-0.43++		
100 SEED WEIGHT		0.58++	-0.09	0.23	-0.43++	1.00		
QUALITY OF SEED								

TABLE 32

EXPERIMENT 6

YEAR 1974

REGION - AFRICA
 SITE - KWADASSO
 LATITUDE - 6 DEG. 41 MIN. N
 DATE PLANTED - MAY 9, 1974
 SOIL TYPE - SANDY LOAM
 FERTILIZER USED (KG/HA) - N 30.0, P 22.0, K 17.0
 AMOUNT OF MOISTURE - 445 MM

COUNTRY - GHANA
 COOPERATOR - H. MERCER-QUARSHIE
 ELEVATION - 270 M
 DATE HARVESTED - AUGUST, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE HEIGHT	PLANT LODGING
1	JUPITER	1518.22	34.00	105.75	120.00	355.00	0.64	9.92	60.25	2.00
5	BOSSIER	1516.97	35.00	93.00	105.00	260.00	1.06	7.67	44.50	1.00
4	IMPROVED PELICAN	1514.47	34.00	91.00	90.00	232.50	0.58	3.51	70.50	1.00
3	HARDEE	1461.13	30.25	88.00	47.50	72.50	0.26	0.42	28.75	1.00
9	FORREST	1410.28	26.00	83.00	202.50	270.00	1.24	3.73	30.00	1.00
7	DAVIS	1354.44	28.25	88.00	115.00	180.00	0.83	3.10	29.00	1.00
14	CALLAND	1296.09	22.00	83.00	65.00	217.50	0.26	2.70	49.25	1.00
2	HAMPTON 266A	1253.17	26.00	88.00	145.00	612.50	0.24	11.42	28.75	1.00
15	SEMME	1198.57	24.75	84.00	152.50	210.00	0.65	2.83	22.00	1.00
13	WILLIAMS	1133.98	23.00	81.25	122.50	265.00	0.57	5.11	43.75	1.00
11	CLARK 63	1093.97	22.75	82.00	162.50	265.00	1.05	4.26	45.00	1.00
6	BAGG	1086.05	25.75	81.75	37.50	135.00	0.15	1.83	32.25	1.00
12	BONUS	1055.63	22.25	82.00	87.50	132.50	0.47	2.10	45.25	1.00
10	HILL	1047.71	29.00	82.50	175.00	152.50	1.08	1.77	25.75	1.00
8	TRACY	863.51	23.50	81.25	172.50	205.00	0.92	6.73	27.75	1.00
GRAND MEAN										
1253.61										
STANDARD ERROR OF A VARIETY MEAN										
109.06										
COEFFICIENT OF VARIATION										
17.40%										
5% LSD VARIETY MEANS (*****=NS)										
311.27										
C O R R E L A T I O N S										
(+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.54++	0.46++	-0.01	0.09	0.06	-0.18	0.33++	0.26+
DAYS TO FLOWER	1.00	0.54++	1.00	0.75++	-0.08	0.05	0.09	0.13	0.36++	0.42++
DAYS TO MATURITY	0.46++	0.46++	0.75++	1.00	-0.02	0.20	-0.01	0.31+	0.47++	0.77++
NODULE NUMBER 1	-0.01	-0.08	-0.02	-0.02	1.00	0.50++	0.71++	0.29+	-0.17	0.0
NODULE NUMBER 2	0.09	0.05	0.20	0.20	0.50++	1.00	0.30+	0.73++	0.09	0.16
NODULE WEIGHT 1	0.06	0.09	0.09	-0.01	0.71++	0.30+	1.00	0.21	-0.05	-0.01
NODULE WEIGHT 2	-0.18	0.13	0.31+	0.31+	0.29+	0.73++	0.21	1.00	0.10	0.23
PLANT	0.33++	0.36++	0.47++	0.47++	-0.17	0.09	-0.05	0.10	1.00	0.42++
LODGING	0.26+	0.42++	0.77++	0.77++	0.0	0.16	-0.01	0.23	1.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	-0.03	-0.20	-0.01	-0.01	-0.15	-0.08	-0.24	0.02	0.22	0.18
PLANTS PER PLANT	0.58++	0.68++	0.58++	0.58++	0.14	0.16	0.28+	0.10	0.30+	0.42++
PODS PER 100 SEED	-0.08	-0.33++	0.03	0.03	-0.13	0.19	-0.33++	0.19	-0.05	0.19
QUALITY OF SEED	-0.21	-0.25	-0.29+	-0.29+	0.02	-0.11	-0.06	-0.17	-0.55++	-0.22

TABLE 32 EXPERIMENT 6 YEAR 1974 (CONTINUED)

ENTY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.00	70.50	55.75	18.25	1.25	36.8	23.9
5	BOSSIER	1.00	58.25	45.25	14.25	1.00	39.8	21.9
4	IMPROVED PELICAN	1.00	64.75	53.50	13.50	1.00	44.8	20.7
3	HARDEE	1.00	57.75	43.25	16.75	2.75	42.1	22.3
9	FORREST	1.00	59.25	51.50	13.00	1.75	37.4	22.4
7	DAVIS	1.00	61.25	43.50	16.75	3.00	43.5	20.1
14	CALLAND	1.00	66.50	32.00	18.25	1.50	39.4	22.0
2	HAMPTON 266A	1.00	63.25	37.00	19.75	1.75	38.9	23.1
15	SEMMES	1.00	72.25	32.75	17.00	1.75	40.5	23.1
13	WILLIAMS	1.00	63.50	31.75	18.50	1.25	40.5	23.2
11	CLARK 63	1.00	70.25	29.75	15.25	1.75	37.9	23.5
6	BAGG	1.00	67.00	33.25	18.00	2.25	38.3	23.1
12	BONUS	1.00	74.00	28.75	17.75	2.00	41.3	22.3
10	HILL	1.00	55.25	40.25	13.75	2.00	36.9	22.4
8	TRACY	1.00	60.00	36.00	16.75	2.50	40.4	21.1
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)								
YIELD	KG/HA	0.00	-0.03	0.58++	-0.08	-0.21		
DAYS TO FLOWER		0.00	-0.20	0.68++	-0.33++	-0.25		
DAYS TO MATURITY		0.00	-0.01	0.58++	0.03	-0.29+		
NODULE NUMBER 1		0.00	-0.15	0.14	-0.13	0.02		
NODULE NUMBER 2		0.00	-0.08	0.16	0.19	-0.11		
NODULE WEIGHT 1		0.00	-0.24	0.28+	-0.33++	-0.06		
NODULE WEIGHT 2		0.00	0.02	0.10	0.14	-0.17		
PLANT	HEIGHT	0.00	0.22	0.30+	-0.05	-0.55++		
LODGING		0.00	0.18	0.42++	0.19	-0.22		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	-0.34++	0.16	-0.08		
PODS PER PLANT		0.00	-0.34++	1.00	-0.24	-0.11		
100 SEED WEIGHT		0.00	0.16	-0.24	1.00	0.10		
QUALITY OF SEED		0.00	-0.08	-0.11	0.10	1.00		

TABLE 33 EXPERIMENT 17 YEAR 1974

REGION - AFRICA COUNTRY - GHANA
 SITE - LEGON COOPERATOR - R.B. DADSON
 LATITUDE - 5 DEG. 39 MIN. N ELEVATION - 60 M
 DATE PLANTED - APRIL 25, 1974 DATE HARVESTED - AUGUST, 1974
 SOIL TYPE - SANDY LOAM
 FERTILIZER USED (KG/HA) - N 30.0, P 70.0, K 30.0
 AMOUNT OF MOISTURE - 918 MM
 NUMBER OF IRRIGATIONS - 4
 LOCAL VARIETIES - CES 407, CES 486

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	BOSSIER	1837.91	34.00	101.50	87.25	205.25	0.33	1.94	1.94	29.93	1.00
15	CES 486	1458.88	42.00	105.00	74.50	169.75	0.41	2.59	2.59	59.93	2.25
14	CES 407	1453.33	42.00	105.00	53.75	152.75	0.27	2.20	2.20	73.00	2.25
4	IMPROVED PELICAN	1286.22	34.00	99.75	20.25	63.75	0.13	1.16	1.16	62.90	2.00
13	WILLIAMS	1207.87	25.00	95.75	42.00	68.25	0.53	0.85	0.85	38.98	2.25
3	HARDEE	1184.07	30.25	99.75	41.75	107.00	0.71	1.48	1.48	21.38	2.25
1	JUPITER	1122.10	34.00	101.50	29.50	56.50	0.11	1.10	1.10	33.65	1.75
7	DAVIS	1097.80	28.00	94.00	26.50	81.75	0.66	0.99	0.99	34.23	2.50
6	BRAGG	721.69	25.00	94.00	38.25	95.75	0.53	1.10	1.10	21.05	3.25
9	FORREST	549.90	27.00	98.00	25.75	60.25	0.47	0.72	0.72	21.00	2.00
10	HILL	500.48	29.75	92.00	16.75	38.75	0.45	0.70	0.70	17.50	3.00
11	CLARK 63	478.76	25.00	93.75	52.25	78.50	0.61	1.12	1.12	34.98	1.50
2	HAMPTON 266A	475.01	26.00	97.75	26.25	57.50	0.49	0.62	0.62	17.63	2.25
8	TRACY	415.83	25.00	90.00	50.00	64.00	0.64	0.95	0.95	18.25	3.25
12	BONUS	384.95	25.00	92.00	32.50	65.75	0.54	0.83	0.83	33.08	2.50
GRAND MEAN		944.99	30.13	97.32	41.15	91.03	0.46	1.22	1.22	34.50	2.27
STANDARD ERROR OF A VARIETY MEAN		185.40	0.55	1.98	13.44	27.48	0.07	0.34	0.34	5.63	0.47
COEFFICIENT OF VARIATION		39.24%	3.64%	4.07%	65.32%	60.37%	32.13%	56.20%	56.20%	32.66%	41.33%
5% LSD VARIETY MEANS (*****=NS)		529.13	1.57	5.65	38.36	78.42	0.21	0.98	0.98	16.08	*****

C O R R E L A T I O N S											
(+ - PROB=.05 ++ - PROB=.01)											
YIELD	KG/HA	1.00	0.62++	0.54++	0.24	0.47++	-0.35++	0.50++	0.46++	-0.47++	
DAYS TO FLOWER	1.00	0.62++	1.00	0.68++	0.24	0.47++	-0.52++	0.62++	0.63++	-0.21	
DAYS TO MATURITY	0.54++	0.68++	1.00	0.14	0.14	0.40++	-0.40++	0.48++	0.45++	-0.44++	
NODULE NUMBER 1	0.24	0.24	0.14	1.00	0.77++	0.30+	0.64++	0.16	0.31+	-0.12	
NODULE NUMBER 2	0.47++	0.47++	0.40++	0.77++	1.00	0.90++	0.00	0.46++	0.37++	0.20	
NODULE WEIGHT 1	-0.35++	-0.52++	-0.40++	0.30+	0.64++	0.16	0.31+	0.00	0.46++	-0.13	
NODULE WEIGHT 2	0.50++	0.62++	0.48++	0.48++	0.90++	0.00	0.37++	0.46++	1.00	-0.24	
PLANT	0.46++	0.63++	0.45++	0.45++	0.90++	0.00	0.37++	0.46++	1.00	-0.24	
LODGING	-0.47++	-0.21	-0.44++	-0.12	-0.19	-0.37++	0.20	-0.13	1.00	1.00	
SHATTER	-0.13	-0.02	0.13	0.01	0.02	-0.05	0.04	0.16	-0.04	-0.04	
PLANTS HARVEST	0.50++	0.70++	0.13	0.07	0.16	-0.27+	0.16	0.24	0.24	-0.52++	
PODS PER PLANT	0.50++	0.70++	0.13	0.07	0.16	-0.27+	0.16	0.24	0.24	-0.52++	
100 SEED WEIGHT	0.05	-0.20	0.15	0.14	0.32+	-0.32+	0.43++	0.72++	0.72++	-0.21	
QUALITY OF SEED	-0.63++	-0.49++	0.05	0.20	0.21	0.22	0.13	-0.11	-0.11	-0.22	
			-0.22	0.03	-0.20	0.19	-0.31+	-0.36++	-0.36++	0.15	

TABLE 33 EXPERIMENT 17 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
5	BOSSIER	1.00	101.00	36.37	20.03	3.00	44.7	21.0
15	CES 486	1.00	73.00	49.23	18.78	2.75	44.8	19.7
14	CES 407	1.00	98.00	47.05	18.63	2.25	44.6	20.0
4	IMPROVED PELICAN	1.25	99.25	45.15	14.85	2.25	44.2	21.8
13	WILLIAMS	1.00	90.75	18.08	20.30	3.25	41.0	23.1
3	HARDEE	1.00	63.50	33.33	17.73	2.25	40.1	23.9
1	JUPITER	1.00	90.25	39.80	18.83	3.75	41.0	23.2
7	DAVIS	1.00	82.50	35.67	20.05	2.50	40.9	22.1
6	BRAGG	1.00	95.50	23.05	18.55	4.00	42.9	22.6
9	FORREST	1.00	69.50	26.15	18.40	4.00	42.2	22.1
10	HILL	1.00	65.00	19.78	17.33	3.50	43.5	21.1
11	CLARK 63	1.00	97.25	15.30	18.80	4.25	45.8	21.8
2	HAMPTON 266A	1.00	70.00	12.75	19.75	3.75	42.8	22.8
8	TRACY	1.00	71.50	18.88	18.80	4.00	45.7	19.3
12	BONUS	1.25	77.75	21.38	21.13	4.75	45.9	21.7
	GRAND MEAN	1.03	82.98	29.46	18.79	3.35	43.3	21.7
	STANDARD ERROR OF A VARIETY MEAN	0.09	9.21	4.77	0.85	0.43		
	COEFFICIENT OF VARIATION	17.03%	22.20%	32.39%	9.01%	25.41%		
5%	ISD VARIETY MEANS (*****=NS)	*****	26.28	13.62	2.42	1.21		
C O R R E L A T I O N S								
	YIELD	KG/HA						
	DAYS TO FLOWER	-0.13	0.50++	0.50++	0.05	-0.63++		
	DAYS TO MATURITY	-0.02	0.17	0.70++	-0.20	-0.49++		
	NODULE NUMBER 1	0.13	0.13	0.51++	0.15	-0.22		
	NODULE NUMBER 2	0.01	0.07	0.14	0.20	0.03		
	NODULE WEIGHT 1	0.02	0.16	0.32+	0.21	-0.20		
	NODULE WEIGHT 2	-0.05	-0.27+	-0.32+	0.22	0.19		
	PLANT HEIGHT	0.04	0.16	0.43++	0.13	-0.31+		
	LODGING	0.16	0.24	0.72++	-0.11	-0.36++		
	SHATTER	-0.04	-0.52++	-0.21	-0.22	0.15		
	HARVEST	1.00	-0.02	0.17	-0.00	0.02		
	PLANTS PER PLANT	-0.02	1.00	0.05	0.07	-0.19		
	100 SEED WEIGHT	0.17	0.05	1.00	-0.17	-0.40++		
	QUALITY OF SEED	-0.00	0.07	-0.17	1.00	0.37++		
		0.02	-0.19	-0.40++	0.37++	1.00		

TABLE 34 EXPERIMENT 75A YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
1	HAMPTON 266A	1.00	0.00	0.00	17.50	4.00
3	IMPROVED PELICAN	1.00	0.00	0.00	13.00	4.00
6	DAVIS	1.00	0.00	0.00	16.50	4.00
4	BOSSIER	1.00	0.00	0.00	17.75	4.00
7	TRACY	1.00	0.00	0.00	21.25	4.00
8	FORREST	1.00	0.00	0.00	14.75	4.00
13	CALLAND	1.00	0.00	0.00	23.75	4.00
14	SEWES	1.00	0.00	0.00	17.75	4.00
2	HARDEE	1.00	0.00	0.00	17.25	4.00
5	BRAGG	1.00	0.00	0.00	20.00	4.00
9	HILL	1.00	0.00	0.00	15.00	4.00
12	WILLIAMS	1.00	0.00	0.00	19.50	4.00
10	CLARK 63	1.00	0.00	0.00	18.00	4.00
11	BONUS	1.00	0.00	0.00	22.25	4.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	0.00	0.00	18.16	4.00
COEFFICIENT OF VARIATION		0.00	0.00	0.00	0.98	0.00
5% LSD VARIETY MEANS (*****=NS)		0.00	0.00%	0.00%	10.79%	0.00%
		0.00	0.00	0.00	2.80	0.00
C O R R E L A T I O N S						
			(+ - PROB=.05		++ - PROB=.01)	
YIELD	KG/HA	0.00	0.00	0.00	-0.06	0.00
DAYS TO FLOWER		0.00	0.00	0.00	-0.53++	0.00
DAYS TO MATURITY		0.00	0.00	0.00	-0.43++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.00	0.00	-0.12	0.00
	LODGING	0.00	0.00	0.00	0.00	0.00
	SHATTER	1.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	0.00	1.00	0.00	0.00
100 SEED	WEIGHT	0.00	0.00	0.00	1.00	0.00
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00

TABLE 35

EXPERIMENT 75B

YEAR 1974

REGION - AFRICA
 SITE - DEKOKAKA
 LATITUDE - 10 DEG. N
 DATE PLANTED - JULY 3, 1974
 SOIL TYPE - SILT
 FERTILIZER USED (KG/HA) - N 30.0, P 13.5, K 51.0
 AMOUNT OF MOISTURE - 693 MM

COUNTRY - IVORY COAST
 COOPERATOR - AYEYOU D. ASSA
 ELEVATION - 300 M
 DATE HARVESTED - OCTOBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	BOSSIER	2834.25	34.00	96.00	0.00	0.00	0.00	0.00	46.50	1.00
3	HARDEE	2808.50	34.00	94.00	0.00	0.00	0.00	0.00	32.50	1.00
1	JUPITER	2754.50	34.00	117.00	0.00	0.00	0.00	0.00	57.75	1.00
7	DAVIS	2741.75	34.00	96.00	0.00	0.00	0.00	0.00	27.25	1.00
6	BRAGG	2620.75	31.00	94.00	0.00	0.00	0.00	0.00	28.50	1.00
2	HAMPTON 266A	2587.50	31.00	94.25	0.00	0.00	0.00	0.00	25.00	1.00
9	FORREST	2473.00	31.00	94.00	0.00	0.00	0.00	0.00	24.00	1.00
10	HILL	2398.00	29.00	90.00	0.00	0.00	0.00	0.00	30.25	1.00
4	IMPROVED PELICAN	2373.00	34.00	96.00	0.00	0.00	0.00	0.00	82.75	1.00
11	CLARK 63	2372.00	29.00	89.75	0.00	0.00	0.00	0.00	45.75	1.00
15	TRACY	1672.75	31.00	89.00	0.00	0.00	0.00	0.00	21.25	1.00
15	SEMMES	1647.75	31.00	96.00	0.00	0.00	0.00	0.00	18.25	1.00
14	CALLAND	1366.75	29.00	89.00	0.00	0.00	0.00	0.00	31.75	1.00
12	BONUS	1352.00	29.00	89.00	0.00	0.00	0.00	0.00	28.00	1.00
13	WILLIAMS	900.00	29.00	89.00	0.00	0.00	0.00	0.00	22.75	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2193.50	31.33	94.20	0.00	0.00	0.00	0.00	34.82	1.00
COEFFICIENT OF VARIATION		241.89	0.00	0.09	0.00	0.00	0.00	0.00	2.99	0.00
5% LSD VARIETY MEANS (*****=NS)		22.06%	0.00%	0.19%	0.00%	0.00%	0.00%	0.00%	17.20%	0.00%
		690.38	0.00	0.26	0.00	0.00	0.00	0.00	8.55	0.00
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	0.56++	0.41++	0.00	0.00	0.00	0.00	0.40++	0.00
DAYS TO FLOWER	0.56++	1.00	0.64++	0.64++	0.00	0.00	0.00	0.00	0.47++	0.00
DAYS TO MATURITY	0.41++	0.64++	1.00	1.00	0.00	0.00	0.00	0.00	0.43++	0.00
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT	HEIGHT	0.40++	0.47++	0.43++	0.00	0.00	0.00	0.00	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.13	0.05	0.18	0.00	0.00	0.00	0.00	0.11	0.00
PODS PER	PLANT	0.74++	0.49++	0.47++	0.00	0.00	0.00	0.00	0.42++	0.00
100 SEED	WEIGHT	-0.01	0.08	0.10	0.00	0.00	0.00	0.00	-0.48++	0.00
QUALITY	OF SEED	-0.38++	-0.21	-0.14	0.00	0.00	0.00	0.00	-0.15	0.00

TABLE 35 EXPERIMENT 75B YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	BOSSIER	1.00	111.00	33.75	21.00	2.00
3	HARDEE	1.00	105.00	37.50	23.00	2.00
1	JUPITER	1.00	118.50	41.75	22.00	2.00
7	DAVIS	1.00	114.25	30.75	22.00	2.00
6	BRAGG	1.00	110.25	31.50	23.00	2.00
2	HAMPTON 266A	1.00	117.25	29.00	21.75	2.00
9	FORREST	1.00	109.00	32.75	19.00	2.00
10	HILL	1.00	107.25	28.50	19.00	2.00
4	IMPROVED PELICAN	1.00	106.00	35.00	16.50	2.00
11	CLARK 63	1.00	118.25	29.25	18.75	2.00
8	TRACY	1.00	96.00	23.75	22.75	2.00
15	SEMMES	1.00	87.00	31.75	20.75	2.00
14	CALLAND	1.00	108.25	18.00	21.75	2.00
12	BONUS	1.00	109.50	27.00	20.00	2.25
13	WILLIAMS	1.00	107.25	12.50	22.50	2.25
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	108.32	29.52	20.92	2.03
COEFFICIENT OF VARIATION		0.00	5.72	4.11	0.31	0.09
5% LSD VARIETY MEANS (*****=NS)		0.00%	10.55%	27.85%	2.92%	8.65%
		0.00	16.31	11.73	0.87	*****
C O R R E L A T I O N S						
		(+ - PROB=.05		++ - PROB=.01)		
YIELD	KG/HA	0.00	0.13	0.74++	-0.01	-0.38++
DAYS TO FLOWER		0.00	0.05	0.49++	0.08	-0.21
DAYS TO MATURITY		0.00	0.18	0.47++	0.10	-0.14
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.11	0.42++	-0.48++	-0.15
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	-0.10	0.01	0.23
PODS PER PLANT		0.00	-0.10	1.00	-0.09	-0.16
100 SEED WEIGHT		0.00	0.01	-0.09	1.00	0.06
QUALITY OF SEED		0.00	0.23	-0.16	0.06	1.00

TABLE 36

EXPERIMENT 75C

YEAR 1974

REGION - AFRICA
 SITE - N'DAKRO
 LATITUDE - 7 DEG. 50 MIN. N
 DATE PLANTED - AUGUST 9, 1974
 SOIL TYPE - SILT, PH 6.0
 FERTILIZER USED (KG/HA) - P 16.0, K 55.4
 AMOUNT OF MOISTURE - 566 MM
 AMOUNT OF IRRIGATION - 42 MM

COUNTRY - IVORY COAST
 COOPERATOR - AYEHO D. ASSA
 ELEVATION - 200 M
 DATE HARVESTED - NOVEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	BOSSIER	3368.75	35.00	93.00	344.50	579.50	2.25	4.30	49.25	1.50
4	IMPROVED PELICAN	3016.75	35.00	94.75	251.25	504.50	1.63	4.05	65.75	2.00
1	JUPITER	3000.00	34.00	107.00	219.50	408.50	1.48	3.20	75.75	2.75
7	DAVIS	2927.00	33.00	102.00	288.75	540.50	2.40	5.90	33.25	1.25
3	HARDEE	2912.25	32.00	106.00	381.25	573.00	2.05	5.10	29.25	1.00
6	BRAGG	2860.50	28.00	95.50	511.00	716.25	2.50	4.35	35.75	1.50
15	SEMMES	2708.50	31.00	100.75	333.25	535.00	1.85	3.85	26.00	1.00
10	HILL	2571.00	32.00	88.75	211.25	342.50	1.45	3.35	33.00	2.00
13	WILLIAMS	2498.00	27.00	89.50	314.50	572.00	1.95	4.37	45.25	1.00
2	HAMPTON 266A	2412.25	31.00	93.50	359.00	431.00	2.38	3.00	31.75	1.00
14	CALLAND	2389.50	27.00	92.25	302.50	383.50	2.20	3.90	47.75	1.50
12	BONUS	2194.00	27.00	88.75	332.00	492.50	2.00	4.30	42.75	1.00
9	FORREST	2079.25	28.00	97.00	294.00	406.25	1.75	3.48	31.00	1.50
11	CLARK 63	2066.50	27.00	88.00	187.75	424.75	1.68	3.90	46.75	1.25
8	TRACY	1856.25	28.00	89.50	193.25	294.50	1.60	4.55	25.75	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2590.70	30.33	95.08	301.58	480.28	1.94	4.11	41.27	1.42
COEFFICIENT OF VARIATION		146.13	0.00	1.54	29.91	60.61	0.21	0.55	1.75	0.20
5% LSD VARIETY MEANS (*****=NS)		11.28%	0.00%	3.24%	19.83%	25.24%	21.21%	26.99%	8.47%	28.26%
		417.07	0.00	4.39	85.35	172.99	0.59	*****	4.99	0.57
C O R R E L A T I O N S										
		(+ - PROB=.05			++ - PROB=.01)=					
YIELD	KG/HA	1.00	0.69++	0.43++	0.20	0.33+	0.20	0.03	0.34++	0.29+
DAYS TO FLOWER		0.69++	1.00	0.47++	-0.07	0.09	-0.05	0.02	0.35++	0.40++
DAYS TO MATURITY		0.43++	0.47++	1.00	0.21	0.17	0.07	-0.00	0.08	0.28+
NODULE NUMBER 1		0.20	-0.07	0.21	1.00	0.59++	0.66++	0.11	-0.24	-0.20
NODULE NUMBER 2		0.33+	0.09	0.17	0.59++	1.00	0.34++	0.58++	0.02	-0.10
NODULE WEIGHT 1		0.20	-0.05	0.07	0.66++	0.34++	1.00	0.19	-0.20	-0.18
NODULE WEIGHT 2		0.03	0.02	-0.00	0.11	0.58++	0.19	1.00	-0.12	-0.26+
PLANT HEIGHT		0.34++	0.35++	0.08	-0.24	0.02	-0.20	-0.12	1.00	0.56++
LODGING		0.29+	0.40++	0.28+	-0.20	-0.10	-0.18	-0.26+	0.56++	1.00
SHATTER		-0.24	-0.10	0.03	-0.02	-0.04	-0.06	0.01	-0.18	-0.18
HARVEST		-0.00	-0.15	-0.43++	-0.03	0.00	0.04	-0.01	-0.06	0.06
PLANTS PER		0.43++	0.57++	0.54++	-0.08	0.14	-0.12	0.05	0.54++	0.32+
100 SEED		0.29+	0.04	0.33+	0.36++	0.29+	0.25	0.15	-0.39++	-0.28+
QUALITY	OF SEED	0.02	-0.01	-0.20	-0.03	-0.14	-0.11	-0.37++	0.40++	0.26+

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	BOSSIER	1.00	175.50	28.25	20.00	3.50
4	IMPROVED PELICAN	1.00	162.25	32.25	15.50	3.25
1	JUPITER	1.00	134.25	39.00	19.00	3.50
7	DAVIS	1.00	179.50	27.25	21.25	1.75
3	HARDEE	1.00	148.25	29.75	21.25	2.00
6	BRAGG	1.00	188.00	21.50	21.25	2.75
15	SEMMES	1.25	141.00	23.50	21.25	2.00
10	HILL	1.00	236.50	17.75	18.25	2.75
13	WILLIAMS	1.00	160.25	21.50	19.75	2.25
2	HAMPTON 266A	1.25	170.75	21.50	19.75	3.25
14	CALLAND	1.00	177.25	21.50	18.25	3.50
12	BONUS	1.00	196.25	23.50	18.25	3.25
9	FORREST	1.00	153.00	25.50	16.75	3.50
11	CLARK 63	1.25	211.75	19.25	17.75	3.25
8	TRACY	1.25	140.75	16.50	19.75	2.25
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.07	171.68	24.57	19.20	2.85
COEFFICIENT OF VARIATION		0.13	9.82	2.24	0.70	0.40
5% LSD VARIETY MEANS (*****=NS)		24.49% *****	11.44%	18.20%	7.29%	27.84%
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD	KG/HA	-0.24	-0.00	0.43++	0.29+	0.02
DAYS TO FLOWER		-0.10	-0.15	0.57++	0.04	-0.01
DAYS TO MATURITY		0.03	-0.43++	0.54++	0.33+	-0.20
NODULE NUMBER 1		-0.02	-0.03	-0.08	0.36++	-0.03
NODULE NUMBER 2		-0.04	0.00	0.14	0.29+	-0.14
NODULE WEIGHT 1		-0.06	0.04	-0.12	0.25	-0.11
NODULE WEIGHT 2		0.01	-0.01	0.05	0.15	-0.37++
PLANT HEIGHT		-0.18	-0.06	0.54++	-0.39++	0.40++
LODGING		-0.18	0.06	0.32+	-0.28+	0.26+
SHATTER		1.00	-0.09	-0.23	-0.03	-0.32+
PLANTS HARVEST		-0.09	1.00	-0.39++	-0.09	0.16
PODS PER PLANT		-0.23	-0.39++	1.00	0.00	0.13
100 SEED WEIGHT		-0.03	-0.09	0.00	1.00	-0.30+
QUALITY OF SEED		-0.32+	0.16	0.13	-0.30+	1.00

TABLE 37

EXPERIMENT 151

YEAR 1974

REGION - AFRICA
 SITE - KADAWA
 LATITUDE - 11 DEG. 45 MIN. N
 DATE PLANTED - JUNE 25, 1974
 SOIL TYPE - SANDY LOAM
 FERTILIZER USED (KG/HA) - P 20.0, K 103.8
 AMOUNT OF MOISTURE - 640 MM

COUNTRY - NIGERIA
 COOPERATOR - KANO RIVER PROJECT
 DATE HARVESTED - OCTOBER 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE				NODULE			PLANT HEIGHT	LODGING
					NUMBER 1	NUMBER 2	WEIGHT 1	WEIGHT 2	WEIGHT 1	WEIGHT 2	WEIGHT 2		
5	BOSSIER	1915.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	JUPITER	1705.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	HARDEE	1445.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	DAVIS	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	IMPROVED PELICAN	1287.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	HAMPTON 266A	1240.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	BRAGG	1210.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	SEMMES	1190.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	CLARK 63	1062.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	FORREST	981.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	WILLIAMS	860.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	TRACY	837.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	HILL	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	CALLAND	617.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	BONUS	530.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GRAND MEAN		1132.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STANDARD ERROR OF A VARIETY MEAN		67.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COEFFICIENT OF VARIATION		11.84%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5% ISD VARIETY MEANS (*****=NS)		191.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C O R R E L A T I O N S													
YIELD		KG/HA											
DAYS TO FLOWER		1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
HARVEST		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS PER PLANT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PODS PER PLANT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100 SEED WEIGHT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

{+ - PROB=.05 ++ - PROB=.01}

TABLE 37 EXPERIMENT 151 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	BOSSIER	0.00	0.00	0.00	0.00	0.00
1	JUPITER	0.00	0.00	0.00	0.00	0.00
3	HARDEE	0.00	0.00	0.00	0.00	0.00
7	DAVIS	0.00	0.00	0.00	0.00	0.00
4	IMPROVED PELICAN	0.00	0.00	0.00	0.00	0.00
2	HAMPTON 266A	0.00	0.00	0.00	0.00	0.00
6	BRAGG	0.00	0.00	0.00	0.00	0.00
15	SEMHES	0.00	0.00	0.00	0.00	0.00
11	CLARK 63	0.00	0.00	0.00	0.00	0.00
9	FORREST	0.00	0.00	0.00	0.00	0.00
13	WILLIAMS	0.00	0.00	0.00	0.00	0.00
8	TRACY	0.00	0.00	0.00	0.00	0.00
10	HILL	0.00	0.00	0.00	0.00	0.00
14	CALLAND	0.00	0.00	0.00	0.00	0.00
12	BONUS	0.00	0.00	0.00	0.00	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	0.00	0.00	0.00	0.00
COEFFICIENT OF VARIATION		0.00%	0.00%	0.00%	0.00%	0.00%
5% ISD VARIETY MEANS (*****=NS)		0.00	0.00	0.00	0.00	0.00
C O R R E L A T I O N S						
		(+ - PROB=-.05			++ - PROB=-.01)	
YIELD	KG/HA	0.00	0.00	0.00	0.00	0.00
DAYS TO FLOWER		0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.00	0.00	0.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.00	1.00	0.00	0.00	0.00
PODS PER PLANT		0.00	0.00	1.00	0.00	0.00
100 SEED WEIGHT		0.00	0.00	0.00	1.00	0.00
QUALITY OF SEED		0.00	0.00	0.00	0.00	1.00

TABLE 38 EXPERIMENT 113

YEAR 1974

REGION - AFRICA
SITE - SALISBURY

COUNTRY - RHODESIA

SITE - SALISBURY

COOPERATOR - J. TATTERSFIELD, J. TICHAGWA

LATITUDE - 17 DEG. 48 MIN. S

ELEVATION - 1506 M

DATE PLANTED - NOVEMBER 26, 1974

DATE HARVESTED - MARCH, 1975

SOIL TYPE - SAND 30%, SILT 20%, CLAY 50% PH 5.9

FERTILIZER USED (KG/HA) - N 24.0 - P 45.0 - K 30.0

AMOUNT OF MOISTURE - 893 MM

ALLOUINI OF HOLSTUNE - 693
NUMBER OF IRRIGATIONS - 3

LOCAL VARIETIES - RHOSA. ORIBI

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/Ha	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
15	ORIBI	3968.71	49.00	129.00	313.25	433.50	1.75	2.55	85.75	1.00
9	FOPREST	3703.24	49.00	126.00	242.75	615.00	1.75	3.55	78.25	2.75
6	BRAGG	3526.54	49.00	119.75	307.75	787.75	1.95	4.20	71.75	2.00
2	HAMPTON 266A	3312.33	49.00	133.00	360.25	571.00	2.23	3.33	76.25	1.25
14	RHOSA	3302.33	49.00	119.00	311.50	484.00	2.08	3.13	96.25	2.00
12	BONUS	3146.46	32.00	101.00	201.50	288.00	1.30	3.20	62.00	1.00
5	BOSSIER	3047.28	66.00	147.00	517.00	1050.25	3.15	3.73	98.75	4.25
7	DAVIS	2953.09	59.00	135.25	332.00	879.25	2.73	4.45	91.25	2.50
8	TRACY	2948.09	42.00	112.00	289.25	473.00	1.90	5.05	58.75	1.75
11	CLARK 63	2922.25	35.00	105.00	232.50	256.25	1.30	2.88	61.00	1.00
13	WILLIAMS	2859.32	35.00	105.00	337.00	309.75	1.50	2.58	57.50	1.00
10	HILL	2645.95	56.00	126.00	276.75	535.50	2.28	3.28	85.00	2.75
3	HARDEE	2525.92	70.00	147.00	456.00	877.50	3.63	4.75	102.50	5.00
4	IMPROVED PELICAN	1724.09	84.00	161.00	1097.75	875.75	4.55	4.68	175.75	5.00
1	JUPITER	937.27	98.00	178.00	1009.00	990.50	4.20	4.58	174.25	5.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/Ha	1.00	-0.72++	-0.64++	-0.76++	-0.42++	-0.69++	-0.40++	-0.73++	-0.64++
DAYS TO FLOWER	1.00	0.98++	1.00	0.98++	0.85++	0.80++	0.92++	0.50++	0.89++	0.89++
DAYS TO MATURITY	-0.64++	0.98++	0.98++	1.00	0.82++	0.81++	0.90++	0.46++	0.90++	0.85++
NODULE NUMBER 1	-0.76++	-0.64++	0.85++	0.82++	1.00	0.60++	0.88++	0.44++	0.91++	0.72++
NODULE NUMBER 2	-0.42++	0.80++	0.80++	0.81++	0.60++	1.00	0.77++	0.66++	0.63++	0.78++
NODULE WEIGHT 1	-0.69++	0.92++	0.92++	0.90++	0.88++	0.77++	1.00	0.58++	0.88++	0.86++
NODULE WEIGHT 2	-0.40++	0.50++	0.50++	0.46++	0.44++	0.66++	0.58++	1.00	0.38++	0.53++
PLANT HEIGHT	-0.73++	0.94++	0.94++	0.90++	0.91++	0.78++	0.86++	0.38++	1.00	0.80++
LODGING	-0.64++	0.89++	0.89++	0.85++	0.72++	0.63++	0.88++	0.53++	0.80++	0.80++
SHATTER	0.68++	-0.65++	-0.65++	-0.62++	-0.58++	-0.36++	-0.46++	-0.24	-0.62++	-0.43++
PLANTS PER HARVEST	-0.21	0.02	0.02	0.03	0.03	-0.05	0.05	0.00	0.03	0.13
PODS PER PLANT	0.04	0.37++	0.37++	0.39++	0.22	0.42++	0.42++	0.21	0.34++	0.51++
100 SEED WEIGHT	0.43++	-0.28+	-0.28+	-0.19	-0.37++	-0.10	-0.38++	-0.20	-0.38++	-0.48++
QUALITY OF SEED	-0.38++	0.10	0.10	0.06	0.20	0.14	0.17	0.24	0.05	0.30+

TABLE 38 EXPERIMENT 113 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
15	ORIBI	1.00	193.25	35.05	19.50	1.00	42.5	20.4
9	FORREST	1.00	195.00	40.58	16.23	3.00	40.7	20.8
6	BAGG	1.00	189.75	30.50	20.58	3.00	42.7	20.3
2	HAMPTON 266A	1.00	196.25	35.18	21.18	3.00	41.8	20.1
14	RHOSA	1.00	196.75	33.38	17.90	2.00	39.4	22.0
12	BONUS	1.00	196.00	32.18	15.53	3.00	44.1	21.8
5	BOSSIER	1.00	196.00	41.55	16.40	3.00	43.9	21.3
7	DAVIS	1.00	194.50	40.13	18.45	2.00	43.3	20.9
8	TRACY	1.00	196.50	26.85	17.00	2.75	44.1	18.3
11	CLARK 63	1.00	197.25	27.48	16.35	3.00	41.0	22.7
13	WILLIAMS	1.00	196.25	26.53	18.05	3.00	41.1	22.9
10	HILL	1.00	200.75	39.13	15.40	2.75	42.6	19.3
3	HARDEE	1.00	197.75	47.10	15.23	3.00	45.0	19.6
4	IMPROVED PELICAN	1.00	195.50	48.50	12.20	3.00	45.2	18.3
1	JUPITER	0.00	196.00	26.55	17.65	3.00	43.5	18.6
	GRAND MEAN	0.93	195.83	35.38	17.17	2.70	42.7	20.5
	STANDARD ERROR OF A VARIETY MEAN	0.00	2.11	2.28	0.38	0.09		
	COEFFICIENT OF VARIATION	0.00%	2.16%	12.89%	4.40%	6.84%		
	5% LSD VARIETY MEANS (*****= NS)	0.00	*****	6.51	1.08	0.26		
C O R R E L A T I O N S								
			(+ - PROB=.05		++ - PROB=.01)			
	YIELD	0.68++	-0.21	0.04	0.43++	-0.38++		
	KG/HA	-0.65++	0.02	0.37++	-0.28+	0.10		
	DAYS TO FLOWER	-0.62++	-0.00	0.39++	-0.19	0.06		
	DAYS TO MATURITY	-0.58++	0.03	0.22	-0.37++	0.20		
	NODULE NUMBER 1	-0.36++	-0.05	0.42++	-0.10	0.14		
	NODULE NUMBER 2	-0.46++	0.05	0.42++	-0.38+	0.17		
	NODULE WEIGHT 1	-0.24	0.00	0.21	-0.20	0.24		
	NODULE WEIGHT 2	-0.62++	0.03	0.34++	-0.38++	0.05		
	PLANT	-0.43++	0.13	0.51++	-0.48++	0.30+		
	LODGING	1.00	-0.01	0.29+	-0.05	-0.14		
	SHATTER	-0.01	1.00	-0.02	-0.25	0.11		
	PLANTS	0.29+	-0.02	1.00	-0.42++	-0.04		
	PODS PER PLANT	-0.05	-0.25	-0.42++	1.00	-0.30+		
	100 SEED WEIGHT	-0.14	0.11	-0.04	-0.30+	1.00		
	QUALITY OF SEED							

TABLE	39	EXPERIMENT	65	YEAR	1974	(CONTINUED)
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ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
4	IMPROVED PELICAN	1.25	122.00	37.37	11.38	0.00
12	BONUS	1.75	132.25	17.20	16.10	0.00
9	FORREST	1.75	124.75	21.55	13.20	0.00
7	DAVIS	1.00	120.25	16.33	13.50	0.00
5	BOSSIER	1.50	128.00	18.35	11.25	0.00
6	BAGG	1.25	137.50	14.38	16.00	0.00
8	TRACY	1.25	110.25	15.33	16.33	0.00
2	HAMPTON 266A	1.25	130.50	14.43	15.13	0.00
10	HILL	1.00	154.75	11.15	12.63	0.00
1	JUPITER	2.00	116.75	0.00	12.70	0.00
13	WILLIAMS	1.75	110.25	10.15	16.70	0.00
11	CLARK 63	1.25	117.25	12.38	14.80	0.00
14	CALLAND	1.25	127.00	9.57	14.93	0.00
3	HARDEE	1.50	70.00	23.35	12.90	0.00
15	SEMME	1.75	137.50	13.63	11.85	0.00
	GRAND MEAN	1.43	122.60	15.68	13.96	0.00
	STANDARD ERROR OF A VARIETY MEAN	0.28	8.88	2.75	0.68	0.00
	COEFFICIENT OF VARIATION	38.47%	14.48%	35.08%	9.78%	0.00%
	5% LSD VARIETY MEANS (*****NS)	*****	25.34	7.85	1.95	0.00
C O R R E L A T I O N S (+ - PROB=.05 +- - PROB=.01)						
	YIELD KG/HA	-0.11	0.36++	0.45++	-0.00	0.00
	DAYS TO FLOWER	-0.00	-0.06	0.36++	-0.57++	0.00
	DAYS TO MATURITY	0.19	-0.23	0.04	-0.46++	0.00
	NODULE NUMBER 1	0.30+	0.18	0.08	0.31+	0.00
	NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00
	PLANT HEIGHT	-0.05	0.04	0.40++	-0.28+	0.00
	LODGING	0.37++	0.08	-0.01	-0.35++	0.00
	SHATTER	1.00	0.09	-0.13	-0.07	0.00
	HARVEST	0.09	1.00	-0.11	-0.07	0.00
	PLANTS	-0.13	-0.11	1.00	-0.24	0.00
	PODS PER PLANT	-0.07	-0.07	-0.24	1.00	0.00
	100 SEED WEIGHT	0.00	0.00	0.00	0.00	1.00
	QUALITY OF SEED	0.00	0.00	0.00	0.00	1.00

TABLE 40

EXPERIMENT 112

YEAR 1974

REGION - AFRICA
SITE - MALKERNS
LATITUDE - 27 DEG. S
DATE PLANTED - NOVEMBER 25, 1974
SOIL TYPE - LOAM, PH 6.0
FERTILIZER USED (KG/HA) - P 15.0, K 37.0
AMOUNT OF MOISTURE - 539 MM
LOCAL VARIETIES - WELKOM

COUNTRY - SWAZILAND
COOPERATOR - MALKERNS RESEARCH STATION
ELEVATION - 610 M
DATE HARVESTED - MARCH, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
6	BRAGS	3125.62	0.00	120.00	0.00	0.00	0.00	0.00	60.00	1.00
8	TRACY	3042.27	0.00	105.00	0.00	0.00	0.00	0.00	53.75	1.00
13	WILLIAMS	3042.27	0.00	95.00	0.00	0.00	0.00	0.00	58.75	1.00
12	BONUS	2958.92	0.00	95.00	0.00	0.00	0.00	0.00	61.25	1.00
9	FORREST	2958.92	0.00	120.00	0.00	0.00	0.00	0.00	73.75	1.00
15	SEMES	2938.09	0.00	125.00	0.00	0.00	0.00	0.00	53.75	1.00
11	CLARK 63	2917.25	0.00	95.00	0.00	0.00	0.00	0.00	66.25	1.00
10	HILL	2708.87	0.00	120.00	0.00	0.00	0.00	0.00	75.00	1.00
2	HAMPTON 266A	2604.69	0.00	125.00	0.00	0.00	0.00	0.00	63.75	1.00
7	DAVIS	2375.47	0.00	125.00	0.00	0.00	0.00	0.00	97.50	2.00
5	BOSSIER	2208.77	0.00	135.00	0.00	0.00	0.00	0.00	80.00	1.00
14	WELKOM	2167.10	0.00	125.00	0.00	0.00	0.00	0.00	130.00	3.25
3	HARDEE	1667.00	0.00	135.00	0.00	0.00	0.00	0.00	116.25	3.00
4	IMPROVED PELICAN	1041.87	0.00	155.00	0.00	0.00	0.00	0.00	142.50	3.50
4	JUPITER	854.34	0.00	155.00	0.00	0.00	0.00	0.00	158.75	4.25
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	0.00	-0.78++	0.00	0.00	0.00	0.00	-0.83++	-0.76++
DAYS TO FLOWER	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY	0.00	-0.78++	0.00	1.00	0.00	0.00	0.00	0.00	0.76++	0.69++
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	0.00	-0.83++	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LOGGING	-0.76++	0.00	0.00	0.76++	0.00	0.00	0.00	0.00	1.00	0.94++
SHATTER	0.00	0.00	0.00	0.69++	0.00	0.00	0.00	0.00	0.00	1.00
PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	-0.21	0.00	0.00	-0.04	0.00	0.00	0.00	0.00	0.07	0.05
PODS PER PLANT	-0.54++	0.00	0.00	0.62++	0.00	0.00	0.00	0.00	0.55++	0.48++
100 SEED WEIGHT	0.85++	0.00	0.00	-0.83++	0.00	0.00	0.00	0.00	-0.76++	-0.71++
QUALITY OF SEED	0.06	0.00	0.00	-0.45++	0.00	0.00	0.00	0.00	-0.07	-0.05

TABLE 40 EXPERIMENT 112 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
6	BRAGG	0.00	150.75	29.25	20.09	1.00
8	TRACY	0.00	136.50	26.00	20.28	5.00
13	WILLIAMS	0.00	184.75	27.75	21.62	5.00
12	BONUS	0.00	197.00	26.75	20.33	5.00
9	FORREST	0.00	92.25	51.00	17.80	2.75
15	SEMMES	0.00	126.50	30.75	17.78	2.00
11	CLARK 63	0.00	223.25	22.75	20.07	5.00
10	HILL	0.00	183.25	49.75	18.46	2.25
2	HAMPTON 266A	0.00	173.50	29.75	19.31	1.00
7	DAVIS	0.00	127.50	36.50	17.68	1.50
5	BOSSIER	0.00	190.00	31.50	17.63	2.75
14	WELKOM	0.00	118.25	32.00	18.65	2.00
3	HARDEE	0.00	155.25	30.75	14.64	2.25
4	IMPROVED PELICAN	0.00	207.75	102.00	11.04	2.50
1	JUPITER	0.00	181.00	57.25	13.54	4.50
GRAND MEAN						
		0.00	163.17	38.92	17.93	2.97
STANDARD ERROR OF A VARIETY MEAN		0.00	10.15	4.86	0.62	0.21
COEFFICIENT OF VARIATION		0.00%	12.44%	24.99%	6.91%	14.02%
5% LSD VARIETY MEANS (*****=NS)		0.00	28.97	13.88	1.77	0.59
C O R R E L A T I O N S						
		(+ - PROB=.05		++ - PROB=.01)		
YIELD		0.00	-0.21	-0.54++	0.85++	0.06
DAYS TO FLOWER		0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY		0.00	-0.04	0.62++	-0.83++	-0.45++
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT		0.00	0.00	0.00	0.00	0.00
LODGING		0.00	0.07	0.55++	-0.76++	-0.07
SHATTER		0.00	0.05	0.48++	-0.71++	-0.05
PLANTS		1.00	0.00	0.00	0.00	0.00
HARVEST		0.00	1.00	0.14	-0.09	0.37++
PODS PER		0.00	0.14	1.00	-0.64++	-0.13
PLANT		0.00	-0.09	-0.64++	1.00	0.18
100 SEED		0.00	0.37++	-0.13	0.18	1.00
QUALITY		0.00	0.37++	-0.13	0.18	1.00
OF SEED		0.00	0.37++	-0.13	0.18	1.00

TABLE 41 EXPERIMENT 114 YEAR 1974

REGION - AFRICA
 SITE - KITWE
 LATITUDE - 13 DEG. S
 DATE PLANTED - DECEMBER 10, 1974
 SOIL TYPE - SAND, PH 4.7
 FERTILIZER USED (KG/HA) - P 30.0
 AMOUNT OF MOISTURE - 1160 MM
 LOCAL VARIETIES - HALE 3

COUNTRY - ZAMBIA
 COOPERATOR - H. PORS SIMONSEN
 ELEVATION - 1800 M
 DATE HARVESTED - APRIL, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
7	DAVIS	2004.57	46.00	122.00	125.00	0.00	0.00	0.00	31.50	1.00
5	BOSSIER	1823.28	47.25	122.00	146.25	0.00	0.00	0.00	34.75	1.00
4	IMPROVED PELICAN	1629.49	50.75	116.25	104.25	0.00	0.00	0.00	48.00	1.25
3	HARDEE	1598.24	47.75	120.25	98.50	0.00	0.00	0.00	21.75	1.50
10	HILL	1521.14	47.25	114.00	123.00	0.00	0.00	0.00	31.25	1.25
2	HAMPTON 266A	1356.52	33.25	106.75	151.50	0.00	0.00	0.00	19.25	1.00
1	JUPITER	1333.60	43.50	141.50	130.00	0.00	0.00	0.00	73.00	2.00
14	HALE 3	1331.52	41.00	121.00	98.75	0.00	0.00	0.00	29.75	1.25
6	BRAGG	1116.89	35.75	99.75	144.25	0.00	0.00	0.00	21.25	1.25
11	CLARK 63	1114.81	33.25	99.00	159.75	0.00	0.00	0.00	24.25	1.50
15	SEMME	1081.47	35.50	103.25	143.00	0.00	0.00	0.00	15.50	1.00
12	BONUS	1008.53	31.00	97.00	118.75	0.00	0.00	0.00	25.25	1.00
13	WILLIAMS	939.77	28.00	99.00	154.50	0.00	0.00	0.00	22.00	1.50
9	FORREST	825.16	40.75	120.75	98.75	0.00	0.00	0.00	25.00	1.50
8	TRACY	702.22	32.00	94.00	156.25	0.00	0.00	0.00	19.75	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	0.32+	0.32+	0.40++	0.00	0.00	0.00	0.43++	-0.32+
DAYS TO FLOWER		0.32+	1.00	0.69++	-0.38++	0.00	0.00	0.00	0.39++	0.10
DAYS TO MATURITY		0.32+	0.69++	1.00	-0.28+	0.00	0.00	0.00	0.32+	0.32+
NODULE NUMBER 1		0.40++	-0.38++	-0.28+	1.00	0.00	0.00	0.00	0.09	-0.23
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT		0.43++	0.39++	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HEIGHT		-0.32+	0.10	0.32+	0.09	0.00	0.00	0.00	1.00	0.23
LODGING		-0.07	0.11	-0.00	-0.23	0.00	0.00	0.00	0.23	1.00
SHATTER		0.44++	0.01	-0.03	0.24	0.00	0.00	0.00	-0.20	0.05
PLANTS		0.82++	0.55++	0.55++	0.17	0.00	0.00	0.00	0.22	-0.33++
PODS PER PLANT		0.30+	-0.42++	-0.11	0.47++	0.00	0.00	0.00	0.56++	-0.10
100 SEED WEIGHT		0.06	-0.35++	-0.07	0.15	0.00	0.00	0.00	0.05	-0.12
QUALITY OF SEED						0.00	0.00	0.00	-0.14	-0.02

TABLE 41 EXPERIMENT 114 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
7	DAVIS	1.25	184.50	17.22	21.25	3.00	40.6	23.0
5	BOSSIER	1.00	185.25	15.82	20.50	2.75	43.3	23.3
4	IMPROVED PELICAN	1.00	184.25	21.48	12.75	1.25	43.0	22.8
3	HARDEE	1.50	166.50	18.25	19.00	2.75	42.4	24.1
10	HILL	1.00	200.75	14.28	17.25	1.25	38.4	22.6
2	HAMPTON 266A	1.00	194.25	12.70	22.50	3.75	41.7	24.1
1	JUPITER	1.00	183.75	16.45	22.00	3.00	44.9	21.0
14	HALE 3	1.00	187.00	14.58	17.25	2.75	41.1	22.7
6	BRAGG	1.00	183.25	9.75	21.25	2.75	44.1	20.1
11	CLARK 63	1.00	179.25	9.08	18.50	2.75	43.1	22.6
15	SEMMES	1.00	176.75	10.75	18.75	2.75	44.4	22.7
12	BONUS	1.00	185.25	9.00	20.25	3.00	45.8	22.0
13	WILLIAMS	1.00	183.00	6.72	21.00	2.50	44.1	23.0
9	FORREST	1.25	132.25	14.42	16.25	2.50	41.5	22.1
8	TRACY	1.50	163.25	6.50	20.50	3.00		
	GRAND MEAN	1.10	179.28	13.13	19.27	2.65	42.7	22.6
	STANDARD ERROR OF A VARIETY MEAN	0.14	6.27	1.52	0.55	0.27		
	COEFFICIENT OF VARIATION	25.99%	7.00%	23.62%	5.72%	20.31%		
	5% LSD VARIETY MEANS (*****=NS)	*****	17.90	4.37	1.57	0.77		
C O R R E L A T I O N S								
			(+ - PROB=.05		++ - PROB=.01)			
YIELD	KG/HA	-0.07	0.44++	0.82++	0.30+	0.06		
DAYS TO FLOWER		0.11	0.01	0.55++	-0.42++	-0.35++		
DAYS TO MATURITY		-0.00	-0.03	0.55++	-0.11	-0.07		
NODULE NUMBER 1		-0.11	0.24	0.17	0.47++	0.15		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT		-0.20	0.22	0.56++	0.00	0.00		
HEIGHT		0.05	-0.33++	-0.10	0.05	-0.14		
LODGING		1.00	-0.30+	0.01	-0.12	-0.02		
SHATTER		-0.30+	1.00	0.15	-0.03	0.08		
PLANTS HARVEST		0.01	0.15	1.00	0.27+	0.04		
PODS PER PLANT		-0.03	0.04	-0.05	-0.05	-0.11		
100 SEED WEIGHT		0.08	0.04	-0.11	1.00	0.65++		
QUALITY OF SEED					0.65++	1.00		

TABLE	42	EXPERIMENT 58	YEAR 1974
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REGION - ASIA
SITE - BAGHLAN
LATITUDE - 36 DEG. N
COUNTRY - AFGHANISTAN
COOPERATOR - SOOR GRUL
ELEVATION - 510 M

[illegible]

TABLE 42 EXPERIMENT 58 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
12	SEMMES	2.00	0.00	25.00	11.63	0.00
8	CLARK 63	2.00	0.00	23.25	11.10	0.00
7	HILL	2.00	0.00	27.75	11.78	0.00
10	WILLIAMS	2.00	0.00	22.25	10.83	0.00
6	FORREST	2.00	0.00	18.50	11.55	0.00
5	DAVIS	2.00	0.00	25.00	10.93	0.00
3	HARDEE	2.00	0.00	24.00	10.75	0.00
2	HAMPTON 266A	2.00	0.00	20.00	10.80	0.00
1	JUPITER	2.00	0.00	21.00	11.63	0.00
4	IMPROVED PELICAN	2.00	0.00	22.25	10.98	0.00
9	BONUS	2.00	0.00	21.75	11.75	0.00
11	CALLAND	2.00	0.00	19.00	10.73	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		2.00	0.00	22.48	11.20	0.00
COEFFICIENT OF VARIATION		0.00	0.00	2.18	0.45	0.00
5% LSD VARIETY MEANS (*****=NS)		0.00	0.00	19.39%	7.95%	0.00
C O R R E L A T I O N S						
			(+ - PROB=.05	++ - PROB=.01)		
YIELD	KG/HA	0.00	0.00	0.06	0.05	0.00
DAYS TO FLOWER	0.00	0.00	0.00	0.01	-0.03	0.00
DAYS TO MATURITY	0.00	0.00	0.00	-0.09	-0.04	0.00
NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT	0.00	0.00	0.00	0.04	0.22	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	1.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	0.00	0.00	1.00	0.00	0.00	0.00
PODS PER PLANT	0.00	0.00	0.00	1.00	0.50++	0.00
100 SEED WEIGHT	0.00	0.00	0.00	0.50++	1.00	0.00
QUALITY OF SEED	0.00	0.00	0.00	0.00	0.00	1.00

TABLE 43

EXPERIMENT 82

YEAR 1974

REGION - ASIA
 SITE - PANTNAGAR
 LATITUDE - 29 DEG. N
 DATE PLANTED - JULY 2, 1974
 SOIL TYPE - SANDY LOAM
 FERTILIZER USED (KG/HA) - N 20.0, P 80.0, K 60.0
 AMOUNT OF MOISTURE - 780 MM
 LOCAL VARIETIES - PK 71-21, UPSS-38 (ANKUR)

COUNTRY - INDIA
 COOPERATOR - B. B. SINGH
 ELEVATION - 244 M
 DATE HARVESTED - OCTOBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
9	FORREST	3011.02	38.00	102.00	46.63	58.25	1.03	3.15	69.52	0.00
8	TRACY	2642.19	39.00	108.75	40.93	58.50	1.73	3.80	64.30	0.00
3	HARDEE	2602.60	54.00	117.50	45.63	54.00	1.93	2.35	90.72	0.00
13	WILLIAMS	2600.52	30.00	93.00	36.23	52.75	1.50	2.35	84.07	0.00
5	BOSSIER	2521.34	53.00	122.00	55.00	55.50	3.10	1.88	90.25	0.00
15	UPSS-38 (ANKUR)	2494.25	53.50	125.50	52.40	59.25	3.50	3.75	120.65	0.00
10	HILL	2387.98	39.00	95.00	42.18	53.25	0.95	2.30	59.35	0.00
7	DAVIS	2319.21	44.25	108.75	53.45	64.25	2.40	4.12	73.98	0.00
11	CLARK 63	2250.45	28.00	93.50	34.80	63.75	1.55	2.85	89.45	0.00
14	PK 71-21	2200.44	44.50	116.00	46.65	62.50	1.43	2.25	78.07	0.00
6	BAGG	2100.42	42.00	109.75	37.15	53.25	1.08	2.20	73.15	0.00
4	IMPROVED PELICAN	2037.91	57.00	122.00	52.18	64.50	2.93	3.98	151.33	0.00
2	HAMPTON 266A	1912.88	45.00	112.50	60.70	95.25	2.25	3.85	82.67	0.00
12	BONUS	1902.46	27.00	92.00	37.40	54.75	1.95	3.53	78.68	0.00
1	JUPITER	1423.20	61.00	125.75	29.48	45.75	1.15	2.38	129.98	0.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2293.79	43.68	109.60	44.72	59.70	1.90	2.98	89.08	0.00
COEFFICIENT OF VARIATION		140.43	0.22	0.30	7.34	8.62	0.40	0.68	4.41	0.00
5% LSD VARIETY MEANS (*****=NS)		12.24%	1.01%	0.54%	32.81%	28.89%	42.68%	45.31%	9.90%	0.00%
		400.78	0.63	0.85	*****	*****	1.16	*****	12.59	0.00
CORRELATIONS (+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.21	1.00							
DAYS TO MATURITY		0.19	0.95++	1.00						
NODULE NUMBER 1		0.04	0.20	0.24	1.00					
NODULE NUMBER 2		0.04	0.20	0.24	0.34++	1.00				
NODULE WEIGHT 1		-0.01	0.31+	0.39++	0.67++	0.33++	1.00			
NODULE WEIGHT 2		-0.02	0.31+	0.39++	0.67++	0.23	1.00			
PLANT HEIGHT		-0.30+	0.61++	0.60++	0.33++	0.75++	0.32+	1.00		
LODGING		0.00	0.00	0.00	-0.02	0.30+	0.09	0.09	1.00	
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	
PLANTS HARVEST		0.36++	0.07	0.10	0.11	0.00	0.00	0.00	0.00	
PODS PER PLANT		-0.03	0.42++	0.45++	0.16	0.19	0.03	-0.08	-0.08	
100 SEED WEIGHT		0.08	-0.39++	-0.29+	-0.12	-0.11	0.15	0.17	0.21	
QUALITY OF SEED		-0.14	-0.66++	-0.69++	-0.23	-0.01	-0.08	-0.01	-0.40++	
							-0.16	0.05	-0.23	

TABLE 43 EXPERIMENT 82 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
9	FORREST	0.00	118.75	70.00	13.33	1.75	42.8	22.9
8	TRACY	0.00	114.00	64.75	17.53	2.25	44.0	20.4
3	HARDEE	0.00	108.00	47.75	14.05	1.50	42.4	23.1
13	WILLIAMS	0.00	114.25	37.50	14.78	3.00	44.4	24.1
5	BOSSIER	0.00	163.25	51.25	14.83	1.50	44.1	22.8
15	UPSS-38 (ANKUR)	0.00	113.50	58.25	14.30	1.50	41.2	23.4
10	HILL	0.00	162.50	47.00	13.90	3.00	43.8	22.1
7	DAVIS	0.00	141.75	55.25	14.98	1.50	44.1	23.2
11	CLARK 63	0.00	132.25	38.00	15.50	3.75	42.9	25.8
14	PK 71-21	0.00	136.25	58.75	14.00	1.50	42.1	22.9
6	BRAGG	0.00	130.50	54.50	14.73	1.50	43.1	23.4
4	IMPROVED PELICAN	0.00	137.75	69.50	11.53	1.50	42.7	22.3
2	HAMPTON 266A	0.00	133.00	73.00	13.63	2.50	40.0	24.5
12	BONUS	0.00	124.75	41.00	15.83	4.00	45.6	22.9
1	JUPITER	0.00	93.50	65.00	13.63	2.25	42.6	23.8
	GRAND MEAN	0.00	128.27	55.43	14.43	2.20	43.1	23.2
	STANDARD ERROR OF A VARIETY MEAN	0.00	11.94	5.65	0.71	0.22		
	COEFFICIENT OF VARIATION	0.00%	18.61%	20.38%	9.78%	20.41%		
	5% LSD VARIETY MEANS (*****= NS)	0.00	34.06	16.13	2.01	0.64		
C O R R E L A T I O N S								
			(+ - PROB=-.05		++ - PROB=-.01)			
	YIELD KG/HA	0.00	0.36++	-0.03	0.08	-0.14		
	DAYS TO FLOWER	0.00	-0.07	0.42++	-0.39++	-0.66++		
	DAYS TO MATURITY	0.00	-0.10	0.45++	-0.29+	-0.69++		
	NODULE NUMBER 1	0.00	0.11	0.16	-0.12	-0.23		
	NODULE NUMBER 2	0.00	-0.02	0.19	-0.11	-0.01		
	NODULE WEIGHT 1	0.00	0.03	0.15	-0.08	-0.16		
	NODULE WEIGHT 2	0.00	-0.08	0.17	-0.01	0.05		
	PLANT HEIGHT	0.00	-0.08	0.21	-0.40++	-0.23		
	LODGING	0.00	0.00	0.00	0.00	0.00		
	SHATTER	1.00	0.00	0.00	0.00	0.00		
	PLANTS	0.00	1.00	-0.08	-0.01	0.06		
	PODS PER PLANT	0.00	-0.08	1.00	-0.20	-0.38++		
	100 SEED WEIGHT	0.00	-0.01	-0.20	1.00	0.24		
	QUALITY OF SEED	0.00	0.06	-0.38++	0.24	1.00		

TABLE 44

EXPERIMENT 46

YEAR 1974

REGION - ASIA
 SITE - MUNENG
 LATITUDE - 6 DEG. S
 DATE PLANTED - SEPTEMBER 1, 1974
 SOIL PH 6.0
 FERTILIZER USED (KG/HA) - N 20.0, P 72.0, K 50.0
 AMOUNT OF MOISTURE - 373 MM
 NUMBER OF IRRIGATIONS - 3
 LOCAL VARIETIES - NO. 29, NO. 1343

COUNTRY - INDONESIA
 COOPERATOR - R. FREED
 ELEVATION - 10 M
 DATE HARVESTED - DECEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
15	NO. 1343	1883.71	33.00	110.75	255.00	361.00	1.09	2.54	55.95	4.25
4	IMPROVED PELICAN	1855.79	33.00	107.50	129.50	173.75	0.63	1.24	53.73	1.75
14	NO. 29	1752.02	46.50	112.25	333.75	329.25	0.96	1.26	73.98	4.75
1	JUPITER	1276.09	32.00	121.50	155.25	278.00	0.56	1.41	43.35	1.00
5	BOSSIER	1056.46	39.25	116.00	227.25	432.00	0.85	2.09	31.00	1.00
12	BONUS	739.31	26.00	104.00	166.00	188.25	0.26	0.91	36.98	1.00
13	WILLIAMS	565.53	27.00	110.75	170.75	203.75	0.45	1.49	34.45	1.00
6	BRAGG	527.19	27.50	114.00	112.50	157.25	0.35	0.92	25.88	1.00
9	FORREST	525.94	27.50	105.25	105.50	132.75	0.36	0.96	21.55	1.00
8	TRACY	498.43	27.00	104.50	193.00	188.50	0.58	1.59	19.20	1.00
7	DAVIS	435.50	29.00	111.75	118.25	262.00	0.39	1.38	20.35	1.00
11	CLARK 63	27.50	27.50	109.25	117.00	141.75	0.24	1.01	29.23	1.00
10	HILL	275.89	32.75	99.50	90.25	135.50	0.21	0.81	17.60	1.00
2	HAMPTON 266A	274.22	27.00	112.00	178.25	258.75	0.40	1.14	18.35	1.00
3	HARDEE	151.70	31.00	114.75	148.00	328.75	0.44	1.11	11.45	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		821.05	31.07	110.25	166.68	238.08	0.52	1.32	32.87	1.52
COEFFICIENT OF VARIATION		56.73	0.35	2.09	31.34	43.98	0.08	0.26	1.49	0.11
5% LSD VARIETY MEANS (*****=NS)		13.82%	2.28%	3.80%	37.50%	36.95%	32.60%	39.34%	9.05%	14.15%
		161.92	1.01	5.98	89.45	125.53	0.24	0.74	4.25	0.31
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	0.61++	0.21	0.44++	0.29+	0.70++	0.43++	0.91++	0.73++
DAYS TO FLOWER	0.61++	1.00	0.22	0.22	0.46++	0.40++	0.59++	0.21	0.64++	0.67++
DAYS TO MATURITY	0.21	0.22	1.00	0.17	0.17	0.41++	0.26+	0.23	0.18	0.06
NODULE NUMBER 1	0.44++	0.46++	0.46++	0.17	1.00	0.65++	0.77++	0.40++	0.49++	0.56++
NODULE NUMBER 2	0.29+	0.40++	0.40++	0.41++	0.65++	1.00	0.55++	0.61++	0.20	0.32+
NODULE WEIGHT 1	0.70++	0.29+	0.59++	0.26+	0.77++	0.55++	1.00	0.60++	0.61++	0.68++
NODULE WEIGHT 2	0.43++	0.21	0.23	0.23	0.40++	0.61++	0.60++	1.00	0.31+	0.31+
PLANT	HEIGHT	0.91++	0.64++	0.18	0.49++	0.20	0.61++	0.28+	1.00	0.81++
LODGING	0.73++	0.67++	0.06	0.06	0.56++	0.32+	0.68++	0.31+	0.81++	1.00
SHATTER	-0.10	0.16	0.27+	0.27+	0.06	-0.03	0.14	-0.14	-0.01	0.11
PLANTS	HARVEST	0.62++	0.25	0.20	0.36++	0.19	0.45++	0.43++	0.63++	0.41++
PODS PER	PLANT	0.83++	0.73++	0.30+	0.43++	0.23	0.59++	0.17	0.84++	0.68++
100 SEED	WEIGHT	-0.47++	-0.81++	0.03	-0.43++	-0.22	-0.46++	-0.05	-0.58++	-0.75++
QUALITY	OF SEED	-0.46++	-0.25	0.05	-0.11	-0.09	-0.34++	-0.10	-0.35++	-0.38++

TABLE 44 EXPERIMENT 46 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
15	NO. 1343	1.00	149.75	59.95	17.75	2.25	46.6	20.9
4	IMPROVED PELICAN	1.00	129.50	73.95	18.75	2.00	48.1	22.0
14	NO. 29	1.25	154.50	108.98	9.75	2.75	49.0	16.6
1	JUPITER	1.00	104.25	82.45	20.75	3.00	45.6	23.9
5	BOSSIER	1.00	144.50	42.70	18.25	3.00	47.6	22.0
12	BONUS	1.00	138.00	30.60	21.00	3.25	48.2	21.5
13	WILLIAMS	1.00	116.50	30.25	21.50	3.25	48.1	21.1
6	BRAGG	1.25	145.50	30.50	20.00	3.25	47.5	21.7
9	FORREST	1.00	92.25	39.90	18.25	3.00	45.3	22.1
8	TRACY	1.00	98.00	26.57	19.75	3.00	48.0	20.3
7	DAVIS	1.00	127.75	30.92	19.50	3.00	46.7	21.8
11	CLARK 63	1.00	98.25	23.22	20.00	3.00	48.6	21.4
10	HILL	1.00	49.75	28.67	18.75	3.25	44.8	22.1
2	HAMPTON 266A	1.00	104.75	25.03	19.50	3.25	45.5	23.4
3	HARDEE	1.50	24.00	25.60	19.75	2.75	45.7	23.2
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
CORRELATIONS								
(+ - PROB=.05) ++ - PROB=.01)								
YIELD	KG/HA	-0.10	0.62++	0.83++	-0.47++	-0.46++		
DAYS TO FLOWER		0.16	0.25	0.73++	-0.81++	-0.25		
DAYS TO MATURITY		0.27+	0.20	0.30+	0.03	0.05		
NODULE NUMBER 1		0.06	0.36++	0.43++	-0.43++	-0.11		
NODULE NUMBER 2		-0.03	0.19	0.23	-0.22	-0.09		
NODULE WEIGHT 1		0.14	0.45++	0.59++	-0.46++	-0.34++		
NODULE WEIGHT 2		-0.14	0.43++	0.17	-0.05	-0.10		
PLANT HEIGHT		-0.01	0.63++	0.84++	-0.58++	-0.35++		
LODGING		0.11	0.41++	0.68++	-0.75++	-0.38++		
SHATTER		1.00	-0.17	0.10	-0.11	-0.09		
PLANTS HARVEST		-0.17	1.00	0.39++	-0.21	-0.03		
PODS PER PLANT		0.10	0.39++	1.00	-0.62++	-0.35++		
100 SEED WEIGHT		-0.11	-0.21	-0.62++	1.00	0.19		
QUALITY OF SEED		-0.09	-0.03	-0.35++	0.19	1.00		

TABLE 45 EXPERIMENT 110 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
12	BONUS	1.00	162.25	22.75	16.61	1.75	43.0	23.0
14	CALLAND	1.00	142.50	26.25	20.97	2.00	41.8	21.7
3	HARDEE	1.00	157.50	34.50	18.42	2.25	42.1	23.7
8	TRACY	1.00	165.75	23.50	18.98	3.00	43.4	20.2
11	CLARK 63	1.00	137.00	25.50	17.27	2.50	42.7	22.7
5	BOSSIER	1.00	178.75	29.25	15.01	1.50	43.4	21.8
7	DAVIS	1.00	170.00	24.50	16.72	1.50	44.1	20.7
4	IMPROVED PELICAN	1.00	141.25	34.50	12.55	2.00	42.0	22.0
10	HILL	1.00	191.50	23.50	15.25	2.50	39.7	22.9
6	BRAGG	1.00	183.50	18.25	16.26	2.50	41.5	23.2
2	HAMPTON 266A	1.00	176.75	25.75	18.56	2.00	41.1	23.8
13	WILLIAMS	1.00	147.75	24.00	16.34	1.50	42.7	22.8
13	WILLIAMS	1.00	164.00	29.00	13.57	3.00	40.4	23.1
15	S-2	1.00	137.25	50.50	8.97	2.00	45.8	14.9
1	JUPITER	1.00	142.25	32.50	16.17	3.00	45.6	21.0
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=.05) ++ - PROB=.01)								
YIELD	KG/HA	0.00	0.06	0.06	0.43++	-0.17		
DAYS TO FLOWER		0.00	-0.15	0.55++	-0.62++	0.02		
DAYS TO MATURITY		0.00	-0.28+	0.54++	-0.27+	-0.13		
NODULE NUMBER 1		0.00	-0.17	0.58++	-0.43++	-0.04		
NODULE NUMBER 2		0.00	-0.14	0.23	-0.23	-0.31+		
NODULE WEIGHT 1		0.00	-0.25	0.67++	-0.54++	-0.10		
NODULE WEIGHT 2		0.00	-0.14	0.24	-0.01	-0.36++		
PLANT HEIGHT		0.00	-0.47++	0.32+	-0.36++	-0.36++		
LODGING		0.00	-0.20	0.25	-0.54++	-0.07		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	-0.39++	0.05	-0.04		
PODS PER PLANT		0.00	-0.39++	1.00	-0.45++	-0.02		
100 SEED WEIGHT		0.00	0.05	-0.45++	1.00	0.03		
QUALITY OF SEED		0.00	-0.04	-0.02	0.03	1.00		

TABLE	46	EXPERIMENT	56	YEAR	1974
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REGION - ASIA
SITE - KHUMALTAR
LATITUDE - 27 DEG. 40 MIN. N
DATE PLANTED - MAY 15, 1974
SOIL TYPE - CLAY, PH 5.6
FERTILIZER USED (KG/HA) - P 35.0, K 66.0
AMOUNT OF MOISTURE - 1149 MM
LOCAL VARIETIES - VALU VATMAS

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
9	BONUS	4300.44	30.00	100.25	386.00	1204.50	0.12	0.66	67.73	2.00
12	VALU VATNAS	4149.16	35.00	100.50	374.25	1204.25	0.14	0.67	67.80	1.00
11	CALLAND	3825.35	29.00	102.75	311.75	1056.00	0.13	0.61	67.02	1.00
8	CLARK 63	3786.59	31.50	99.75	387.00	1404.50	0.22	0.68	68.87	1.00
10	WILLIAMS	3722.41	29.75	98.00	462.00	1319.00	0.10	0.69	67.80	1.00
5	DAVIS	3612.39	57.50	127.00	1279.50	710.25	0.57	0.63	89.42	3.00
4	BRAGG	3092.28	52.50	122.50	1532.50	1533.75	0.64	0.94	86.15	1.00
3	BOSSIER	3035.61	60.00	139.75	1904.75	1261.25	0.81	0.63	92.55	4.00
2	IMPROVED PELICAN	2653.45	84.00	135.50	839.50	1349.25	0.41	0.85	139.08	4.00
7	FORREST	2555.51	46.50	126.00	1807.00	1286.75	0.69	0.66	64.32	2.00
1	HAMPTON 266A	2067.50	55.25	135.50	2816.25	1011.75	0.89	0.68	74.02	2.00
6	TRACY	2050.41	44.50	135.00	1741.00	1157.75	0.88	0.39	87.67	3.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=-.05 +- - PROB=-.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.51++	-0.51++	-0.75++	-0.68++	-0.04	-0.69++	0.03	-0.34+	-0.42++
DAYS TO MATURITY		-0.75++	1.00	0.83++	0.48++	-0.02	0.53++	0.24	0.83++	0.78++
NODULE NUMBER 1		-0.68++	0.48++	0.79++	1.00	-0.13	0.84++	0.02	0.79++	0.39++
NODULE NUMBER 2		-0.04	-0.02	-0.13	-0.12	1.00	-0.07	0.35+	0.12	0.39++
NODULE WEIGHT 1		-0.69++	0.53++	0.84++	0.88++	-0.07	1.00	0.06	0.06	-0.16
NODULE WEIGHT 2		0.03	0.24	0.02	-0.04	0.35+	-0.02	0.02	0.25	-0.50++
PLANT HEIGHT		-0.34+	0.83++	0.58++	0.12	0.06	0.25	1.00	0.06	-0.06
LODGING		-0.42++	0.78++	0.79++	0.39++	-0.16	0.50++	0.22	1.00	0.72++
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
HARVEST		0.36+	-0.40++	-0.39++	0.37++	-0.41++	-0.37++	-0.45++	-0.28	-0.04
PODS PER PLANT		-0.61++	0.90++	0.78++	0.46++	0.07	0.50++	0.17	0.74++	0.73++
100 SEED WEIGHT		0.62++	-0.87++	-0.85++	-0.61++	0.01	-0.66++	-0.16	-0.66++	-0.71++
QUALITY OF SEED		0.54++	-0.84++	-0.88++	-0.66++	0.05	-0.73++	-0.19	-0.57++	-0.65++

TABLE 46 EXPERIMENT 56 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
9	BONUS	0.00	179.75	29.30	20.00	4.00	46.9	22.9
12	VALU VATTAS	0.00	179.50	31.00	19.25	3.00	47.7	19.9
11	CALLAND	0.00	188.75	33.58	19.00	4.00	43.8	22.1
8	CLARK 63	0.00	170.00	33.95	16.25	4.00	46.5	23.0
10	WILLIAMS	0.00	155.25	34.33	20.25	4.00	43.0	23.9
5	DAVIS	0.00	185.00	46.00	13.83	1.00	42.4	21.8
4	BAGG	0.00	0.00	46.20	14.75	1.00	42.8	22.6
3	BOSSIER	0.00	110.75	66.98	11.33	1.00	43.0	21.1
2	IMPROVED PELICAN	0.00	126.25	93.23	10.50	1.00	47.1	20.2
7	FORREST	0.00	144.00	61.00	15.00	1.25	42.6	22.0
1	HAMPTON 266A	0.00	135.00	61.53	12.70	2.00	39.3	22.9
6	TRACY	0.00	152.25	47.00	15.65	2.00	45.2	21.4
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		0.00	143.88	48.67	15.71	2.35	36.9	22.0
COEFFICIENT OF VARIATION		0.00%	9.24	3.04	0.60	0.07		
5% LSD VARIETY MEANS (*****=NS)		0.00	12.84%	12.48%	7.67%	6.13%		
			26.58	8.74	1.73	0.21		
C O R R E L A T I O N S								
			(+ - PROB=.05	++ - PROB=.01)				
YIELD		0.00	0.36+	-0.61++	0.62++	0.54++		
DAYS TO FLOWER		0.00	-0.40++	0.90++	-0.87++	-0.84++		
DAYS TO MATURITY		0.00	-0.39++	0.78++	-0.85++	-0.88++		
NODULE NUMBER 1		0.00	-0.37++	0.46++	-0.61++	-0.66++		
NODULE NUMBER 2		0.00	-0.41++	0.07	0.01	0.05		
NODULE WEIGHT 1		0.00	-0.37++	0.50++	-0.66++	-0.73++		
NODULE WEIGHT 2		0.00	-0.45++	0.17	-0.16	-0.19		
PLANT		0.00	-0.28	0.74++	-0.66++	-0.57++		
LODGING		0.00	-0.04	0.73++	-0.71++	-0.65++		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	-0.33+	0.39++	0.53++		
PODS PER PLANT		0.00	-0.33+	1.00	-0.79++	-0.72++		
100 SEED WEIGHT		0.00	0.39++	-0.79++	1.00	0.79++		
QUALITY OF SEED		0.00	0.53++	-0.72++	0.79++	1.00		

TABLE	47	EXPERIMENT	61	YEAR	1974
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REGION - ASIA
SITE - PARACHINAR
DATE PLANTED - MAY 25, 1974
FERTILIZER USED (KG/HA) - N 18.0, P 46.0
NUMBER OF IRRIGATIONS - 4
SUBSTITUTE VARIETY - LEE 68
COUNTRY - PAKISTAN
COOPERATOR - SYED BADSHAH
DATE HARVESTED - SEPTEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
8	CLARK 63	1677.17	60.25	114.00	0.00	0.00	0.00	0.00	51.59	2.00
10	WILLIAMS	1464.65	63.75	114.00	0.00	0.00	0.00	0.00	45.72	2.00
9	BONUS	1441.04	60.75	114.00	0.00	0.00	0.00	0.00	48.18	1.50
5	TRACY	1370.15	60.50	150.00	0.00	0.00	0.00	0.00	54.61	1.50
11	LEE 68	1346.49	63.25	151.00	0.00	0.00	0.00	0.00	55.22	2.00
4	DAVIS	1263.80	62.50	150.00	0.00	0.00	0.00	0.00	73.00	1.00
7	HILL	1204.63	61.00	151.00	0.00	0.00	0.00	0.00	71.76	1.00
3	BRAGG	1181.11	61.75	150.00	0.00	0.00	0.00	0.00	68.55	2.00
12	SENNES	956.60	62.50	114.00	0.00	0.00	0.00	0.00	60.33	1.75
1	HAMPTON 266A	921.32	61.00	150.00	0.00	0.00	0.00	0.00	69.85	3.00
2	BOSSIER	755.89	62.25	151.00	0.00	0.00	0.00	0.00	60.96	2.00
6	FORREST	618.91	62.50	151.00	0.00	0.00	0.00	0.00	56.52	1.50
	GRAND MEAN	1183.48	61.83	138.33	0.00	0.00	0.00	0.00	59.69	1.77
	STANDARD ERROR OF A VARIETY MEAN	156.53	0.95	0.00	0.00	0.00	0.00	0.00	0.16	
	COEFFICIENT OF VARIATION	26.45%	3.07%	0.00%	0.00%	0.00%	0.00%	0.00%	15.61%	18.00%
	5% LSD VARIETY MEANS (*****=NS)	450.39	*****	0.00	0.00	0.00	0.00	0.00	13.41	0.46
C O R R E L A T I O N S										
	YIELD	1.00								
	DAYS TO FLOWER	-0.06		-0.34+	0.00	0.00	0.00	0.00	0.12	-0.09
	DAYS TO MATURITY	-0.34+	1.00	0.01	0.00	0.00	0.00	0.00	0.06	0.04
	NODULE NUMBER 1	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.43+	-0.05
	NODULE NUMBER 2	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	PLANT HEIGHT	0.12	0.06	0.43++	0.00	0.00	0.00	1.00	0.00	0.00
	LODGING	-0.09	0.04	-0.05	0.00	0.00	0.00	0.00	1.00	-0.04
	SHATTER	0.34+	-0.24	-0.35+	0.00	0.00	0.00	0.00	-0.10	-0.06
	HARVEST	0.42++	-0.15	-0.16	0.00	0.00	0.00	0.00	0.12	0.05
	PODS PER PLANT	-0.18	0.04	0.66++	0.00	0.00	0.00	0.00	0.51+	-0.03
	100 SEED WEIGHT	0.48++	-0.12	-0.73++	0.00	0.00	0.00	0.00	-0.41+	0.10
	QUALITY OF SEED	-0.05	-0.12	0.17	0.00	0.00	0.00	0.00	-0.20	-0.22

TABLE 47 EXPERIMENT 61 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
8	CLARK 63	2.50	107.25	31.25	16.24	2.00	41.0	21.3
10	WILLIAMS	1.50	81.50	28.50	17.95	2.00	39.8	21.5
9	BONUS	2.75	106.50	29.50	18.41	2.00	41.1	21.3
5	TRACY	1.25	69.75	52.00	14.22	4.00	39.9	15.6
11	LEE 68	2.00	102.00	43.75	11.68	2.00	34.4	19.6
4	DAVIS	1.75	80.75	51.00	12.55	2.00		
7	HILL	2.25	94.25	51.75	12.28	2.00	34.4	19.4
3	BRAGG	1.50	72.75	46.25	12.11	1.00	35.4	18.6
12	SEMMES	1.75	69.75	46.25	12.12	2.00	36.7	19.4
1	HAMPTON 266A	1.75	87.25	50.75	13.83	2.00	36.9	18.0
2	BOSSIER	1.25	92.50	54.00	11.40	2.00	33.9	18.6
6	FORREST	1.50	68.75	47.75	11.56	3.00	33.3	18.9
	GRAND MEAN	1.81	86.08	44.65	13.69	2.17	37.0	19.3
	STANDARD ERROR OF A VARIETY MEAN	0.26	8.97	3.58	0.16	0.00		
	COEFFICIENT OF VARIATION	28.85%	20.84%	16.04%	2.27%	0.00%		
	5% LSD VARIETY MEANS (*****=NS)	0.75	25.81	10.31	0.45	0.00		
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)								
YIELD	KG/HA	0.34+	0.42++	-0.18	0.48++	-0.05		
DAYS TO FLOWER		-0.24	-0.15	0.04	-0.12	-0.12		
DAYS TO MATURITY		-0.35+	-0.16	0.66++	-0.73++	0.17		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT	HEIGHT	-0.10	0.12	0.51++	-0.41++	-0.20		
LODGING		-0.06	0.05	-0.03	0.10	-0.22		
SHATTER		1.00	0.29+	-0.32+	0.33+	-0.22		
HARVEST		0.29+	1.00	-0.22	0.25	-0.21		
PLANTS		-0.32+	-0.22	1.00	-0.65++	0.14		
PODS PER PLANT		0.33+	0.25	-0.65++	1.00	0.02		
100 SEED WEIGHT		-0.22	-0.21	0.14	0.02	1.00		
QUALITY OF SEED								

TABLE 48 EXPERIMENT 62 YEAR 1974

REGION - ASIA	COUNTRY - PAKISTAN
SITE - SARAI NAURANG	COOPERATOR - SYED BADSHAH
LATITUDE - 33 DEG. N	ELEVATION - 305 M
DATE PLANTED - JULY 10, 1974	DATE HARVESTED - NOVEMBER, 1974

[illegible]

TABLE 48 EXPERIMENT 62 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
7	DAVIS	0.00	0.00	73.75	8.77	0.00
11	CLARK 63	0.00	0.00	46.00	11.43	0.00
2	HAMPTON 266A	0.00	0.00	29.25	7.82	0.00
13	WILLIAMS	0.00	0.00	40.00	10.74	0.00
8	TRACY	0.00	0.00	63.75	10.52	0.00
3	HARDEE	0.00	0.00	83.75	7.39	0.00
5	BOSSIER	0.00	0.00	58.00	6.80	0.00
14	CALLAND	0.00	0.00	29.75	8.76	0.00
1	JUPITER	0.00	0.00	45.50	8.73	0.00
6	BRAGG	0.00	0.00	34.00	7.91	0.00
9	FORREST	0.00	0.00	56.50	7.86	0.00
4	IMPROVED PELICAN	0.00	0.00	80.50	5.76	0.00
10	HILL	0.00	0.00	33.50	6.96	0.00
12	BONUS	0.00	0.00	44.50	9.71	0.00
15	SEMMES	0.00	0.00	61.25	8.23	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	0.00	52.00	8.49	0.00
COEFFICIENT OF VARIATION		0.00	0.00	4.73	0.31	0.00
5% LSD VARIETY MEANS (*****=NS)		0.00	0.00	18.20%	7.32%	0.00%
C O R R E L A T I O N S						
		(+ - PROB=-.05			++ - PROB=-.01)	
YIELD	KG/HA	0.00	0.00	0.01	0.34++	0.00
DAYS TO FLOWER		0.00	0.00	0.31+	-0.58++	0.00
DAYS TO MATURITY		0.00	0.00	0.28+	-0.43++	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.00	0.00	0.00	0.00
	LODGING	0.00	0.00	0.16	-0.09	0.00
	SHATTER	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	1.00	0.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	1.00	0.00	0.00	0.00
100 SEED	WEIGHT	0.00	0.00	1.00	-0.23	0.00
QUALITY	OF SEED	0.00	0.00	-0.23	1.00	0.00
		0.00	0.00	0.00	0.00	1.00

TABLE 49 EXPERIMENT 18 YEAR 1974

REGION - ASIA
 SITE - SWAT
 LATITUDE - 34 DEG. 46 MIN. N
 DATE PLANTED - JUNE 11, 1974
 SOIL TYPE - LOAM
 FERTILIZER USED (KG/HA) - N 31.0, P 20.0
 AMOUNT OF MOISTURE - 303 MM
 NUMBER OF IRRIGATIONS - 5
 SUBSTITUTE VARIETY - LEE 68

COUNTRY - PAKISTAN
 COOPERATOR - SYED BADSHAH
 ELEVATION - 895 M
 DATE HARVESTED - OCTOBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
13	WILLIAMS	4492.56	47.00	111.00	283.00	384.25	0.92	1.53	79.75	1.25
14	LEE 68	4358.45	70.75	145.00	549.00	525.25	1.98	1.93	138.50	2.75
7	DAVIS	4346.65	69.25	145.00	258.00	340.75	1.63	2.20	128.25	3.00
6	BRAGG	4181.38	70.75	145.00	450.00	488.00	1.25	1.35	142.25	3.50
12	BONUS	4063.30	48.00	111.00	296.00	349.75	0.97	1.33	92.75	1.50
15	SENNES	3937.35	59.75	145.00	154.75	262.00	1.43	2.50	153.25	4.25
11	CLARK 63	3874.30	48.25	111.00	291.50	328.50	0.85	1.39	86.50	2.00
10	HILL	3708.81	66.00	127.00	405.50	381.50	1.35	1.34	80.75	2.00
9	FORREST	3236.46	64.25	129.50	313.75	389.00	1.13	1.78	97.50	3.25
5	BOSSIER	3071.09	76.00	158.00	314.50	392.50	1.64	2.09	96.25	5.00
8	TRACY	2887.54	69.25	134.00	451.75	368.00	1.25	1.13	104.50	4.25
4	IMPROVED PELICAN	2090.50	95.75	158.00	253.75	549.25	1.45	4.00	156.00	5.00
3	HARDEE	1913.43	86.75	158.00	565.50	562.00	3.20	3.55	112.25	5.00
2	HAMPTON 266A	1216.48	75.25	158.00	311.25	460.75	1.36	2.64	118.00	4.25
1	JUPIER	0.00	100.50	0.00	220.75	279.00	1.18	2.00	177.75	5.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.70++								
DAYS TO MATURITY		0.39++								
NODULE NUMBER 1		0.06								
NODULE NUMBER 2		-0.05								
NODULE WEIGHT 1		-0.16								
NODULE WEIGHT 2		-0.33++								
PLANT HEIGHT		-0.43++								
LODGING		-0.68++								
SHATTER		-0.12								
HARVEST		0.15								
PODS PER PLANT		0.51++								
100 SEED WEIGHT		0.71++								
QUALITY OF SEED		0.06								
		-0.70++								
		0.39++								
		0.06								
		-0.05								
		-0.16								
		-0.33++								
		-0.43++								
		-0.68++								
		-0.12								
		0.15								
		0.51++								
		0.71++								
		0.06								
		-0.70++								
		0.39++								
		0.06								
		-0.05								
		-0.16								
		-0.33++								
		-0.43++								
		-0.68++								
		-0.12								
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		0.51++								
		0.71++								
		0.06								
		-0.70++								
		0.39++								
		0.06								
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		-0.33++								
		-0.43++								
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		0.39++								
		0.06								
		-0.05								
		-0.16								
		-0.33++								
		-0.43++								
		-0.68++								
		-0.12								
		0.15								
		0.51++								
		0.71++								
		0.06								
		-0.70++								
		0.39++								
		0.06								
		-0.05								
		-0.16								
		-0.33++								

TABLE 49 EXPERIMENT 18 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
13	WILLIAMS	1.00	186.75	8.50	18.23	2.00	39.7	21.5
14	LEE 68	1.00	187.00	12.22	16.63	1.00	40.8	18.6
7	DAVIS	2.00	197.75	10.50	17.56	1.00	37.6	20.0
6	BRAGG	1.00	185.25	13.78	17.87	2.00	38.5	19.5
12	BONUS	2.00	177.25	7.45	17.72	1.00	41.4	20.6
15	SEMME	1.00	167.25	11.22	15.59	1.00	38.4	19.5
11	CLARK 63	1.00	174.50	7.50	17.40	2.00	40.3	21.1
10	HILL	1.00	148.75	12.58	14.21	2.00	37.8	19.2
9	PORREST	2.00	188.00	14.62	15.52	2.00	38.6	20.0
5	BOSSIER	1.00	184.25	8.15	15.18	1.00	39.6	18.1
8	TRACY	2.00	184.00	12.38	17.03	3.00	39.4	16.0
4	IMPROVED PELICAN	2.00	170.75	10.20	11.88	3.00	41.1	17.6
3	HARDEE	1.00	159.25	9.72	14.01	2.00	39.8	17.7
2	HAMPTON 266A	2.00	190.00	7.52	18.05	2.00	36.7	18.6
1	JUPITER	1.00	165.00	0.75	0.00	0.00		
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.40	177.72	9.81	15.13	1.67	39.3	19.1
COEFFICIENT OF VARIATION		0.00	13.39	0.93	0.40	0.00		
5% LSD VARIETY MEANS (*****=NS)		0.00	15.07%	19.05%	5.34%	0.00%		
			*****	2.66	1.15	0.00		
C O R R E L A T I O N S								
			(+ - PROB=.05		++ - PROB=.01)			
YIELD	KG/HA	-0.12	0.15	0.51++	0.71++	0.06		
DAYS TO FLOWER		0.02	-0.04	-0.24	-0.64++	-0.05		
DAYS TO MATURITY		0.22	0.12	0.64++	0.74++	0.51++		
NODULE NUMBER 1		-0.15	0.06	0.29+	0.19	0.23		
NODULE NUMBER 2		0.03	-0.30+	0.25	0.10	0.27+		
NODULE WEIGHT 1		-0.15	-0.07	0.06	-0.03	-0.01		
NODULE WEIGHT 2		0.09	-0.32+	-0.00	-0.17	0.09		
PLANT		-0.04	-0.01	-0.23	-0.57++	-0.33++		
LODGING		0.05	-0.05	-0.14	-0.46++	0.01		
SHATTER		1.00	0.22	0.15	0.21	0.35++		
PLANTS		0.22	1.00	-0.03	0.20	-0.00		
PODS PER PLANT		0.15	-0.03	1.00	0.59++	0.48++		
100 SEED WEIGHT		0.21	0.20	0.59++	1.00	0.41++		
QUALITY OF SEED		0.35++	-0.00	0.48++	0.41++	1.00		

TABLE 50	EXPERIMENT 83	YEAR 1974
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REGION - ASIA
SITE - TANDOJAM
LATITUDE - 25 DEG. 2 MIN. N
DATE PLANTED - JUNE 25, 1974
SOIL TYPE - LOAM, PH 8.2
FERTILIZER USED (KG/HA) - N 28.0, K 56.0
NUMBER OF IRRIGATIONS - 7
LOCAL VARIETIES - S.B.L.

COUNTRY - PAKISTAN
COOPERATOR - A.H. CHAUDHRY, M.I. QURESHI
ELEVATION - 19 M
DATE HARVESTED - OCTOBER, 1974

[illegible]

TABLE 50 EXPERIMENT 83 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
3	HARDEE	0.00	97.50	69.00	12.79	0.00
2	HAMPTON 266A	0.00	88.75	65.50	14.07	0.00
5	BOSSIER	0.00	103.25	66.00	11.70	0.00
1	JUPITER	0.00	70.00	80.75	12.64	0.00
15	S-B.L.	0.00	53.25	100.75	6.96	0.00
6	BRAGG	0.00	87.00	61.75	10.83	0.00
4	IMPROVED PELICAN	0.00	106.25	61.50	10.53	0.00
7	DAVIS	0.00	71.00	64.25	12.97	0.00
9	FORREST	0.00	68.25	42.50	9.72	0.00
8	TRACY	0.00	67.25	46.25	13.19	0.00
11	CLARK 63	0.00	96.25	26.50	12.31	0.00
13	WILLIAMS	0.00	73.50	30.50	12.22	0.00
14	CALLAND	0.00	83.00	31.75	14.16	0.00
12	BONUS	0.00	77.50	36.75	14.87	0.00
10	HILL	0.00	75.25	40.75	12.10	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	81.20	54.97	12.07	0.00
COEFFICIENT OF VARIATION		0.00%	5.08	8.49	0.55	0.00
5% LSD VARIETY MEANS (*****=NS)		0.00	12.51%	30.88%	9.08%	0.00%
			14.49	24.22	1.56	0.00
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD KG/HA		0.00	0.15	0.64++	-0.07	0.00
DAYS TO FLOWER		0.00	0.14	0.56++	-0.22	0.00
DAYS TO MATURITY		0.00	0.18	0.56++	-0.05	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.30+	0.00	0.00	0.00
LODGING		0.00	0.30+	0.33++	-0.17	0.00
SHATTER		0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		1.00	0.00	0.00	0.00	0.00
PODS PER PLANT		0.00	1.00	-0.32+	-0.32+	0.00
100 SEED WEIGHT		0.00	-0.32+	1.00	-0.20	0.00
QUALITY OF SEED		0.00	0.00	-0.20	1.00	0.00
			0.00	0.00	0.00	1.00

TABLE	51	EXPERIMENT	63	YEAR	1974
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REGION - ASIA
SITE - TARNAB
LATITUDE - 33 DEG. N
DATE PLANTED - MAY 11, 1974
FERTILIZER USED (KG/HA) - N 18.0, P 46.0
NUMBER OF IRRIGATIONS - 4
SUBSTITUTE VARIETY - LEE 68
COUNTRY - PAKISTAN
COOPERATOR - SYED BADSHAH
ELEVATION - 347 M
DATE HARVESTED - SEPTEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
14	LEE 68	1912.66	81.50	175.00	0.00	0.00	0.00	0.00	55.25	1.00
9	FORREST	1841.82	66.75	152.00	0.00	0.00	0.00	0.00	55.00	2.00
8	TRACY	1629.30	88.75	171.00	0.00	0.00	0.00	0.00	68.25	2.00
2	HAMPTON 266A	1605.69	98.75	182.00	0.00	0.00	0.00	0.00	59.75	1.00
5	BOSSIER	1523.04	97.00	171.00	0.00	0.00	0.00	0.00	51.25	3.00
10	HILL	1511.24	78.00	145.00	0.00	0.00	0.00	0.00	41.50	1.00
13	WILLIAMS	1393.17	40.25	136.00	0.00	0.00	0.00	0.00	53.25	2.00
7	DAVIS	1381.36	79.75	159.00	0.00	0.00	0.00	0.00	63.25	2.00
6	Bragg	1369.56	97.50	178.00	0.00	0.00	0.00	0.00	78.50	3.00
3	HARDEE	1352.62	99.75	182.00	0.00	0.00	0.00	0.00	70.50	3.00
11	CLARK 63	1322.33	45.50	141.00	0.00	0.00	0.00	0.00	49.25	1.00
12	BONUS	991.75	41.50	129.00	0.00	0.00	0.00	0.00	48.75	1.00
15	SEMME	590.33	99.50	178.00	0.00	0.00	0.00	0.00	58.75	2.00
1	JUPITER	389.62	99.25	195.00	0.00	0.00	0.00	0.00	100.00	2.00
4	IMPROVED PELICAN	330.58	95.50	182.00	0.00	0.00	0.00	0.00	73.50	3.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	-0.17	-0.25	0.00	0.00	0.00	0.00	-0.34++	-0.23
DAYS TO FLOWER		-0.17	1.00	0.91++	0.00	0.00	0.00	0.00	0.48++	0.50++
DAYS TO MATURITY		-0.25	0.91++	1.00	0.00	0.00	0.00	0.00	0.65++	0.47++
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		-0.34++	0.48++	0.65++	0.00	0.00	0.00	0.00	1.00	0.43++
LODGING		-0.23	0.50++	0.47++	0.00	0.00	0.00	0.00	0.43++	1.00
SHATTER		0.21	0.17	0.07	0.00	0.00	0.00	0.00	-0.03	0.07
HARVEST		0.25	-0.16	-0.19	0.00	0.00	0.00	0.00	-0.20	-0.24
PODS PER PLANT		0.52++	0.19	0.25	0.00	0.00	0.00	0.00	0.21	0.00
100 SEED WEIGHT		0.41++	0.26+	0.32+	0.00	0.00	0.00	0.00	0.17	0.04
QUALITY OF SEED		-0.42++	-0.19	-0.07	0.00	0.00	0.00	0.00	0.18	-0.19

TABLE 51 EXPERIMENT 63 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
14	LEE 68	1.00	139.75	62.00	11.32	2.00
9	FORREST	2.00	123.50	52.00	8.27	3.00
8	TRACY	4.00	77.75	77.75	14.58	3.00
2	HAMPTON 266A	2.00	129.00	48.00	12.44	3.00
5	BOSSIER	2.00	134.75	45.00	10.28	3.00
10	HILL	1.00	161.00	45.25	8.57	3.00
13	WILLIAMS	1.00	110.50	47.75	10.09	3.00
7	DAVIS	2.00	94.75	34.75	10.42	2.00
6	BRAGG	1.00	123.25	49.25	10.66	1.00
3	HARDER	2.00	125.00	48.00	10.94	2.00
11	CLARK 63	1.00	136.50	32.25	9.74	3.00
12	BONUS	2.00	124.75	32.50	8.82	4.00
15	SEMME	2.00	87.75	42.00	8.99	2.00
1	JUPITER	1.00	110.75	49.50	10.10	5.00
4	IMPROVED PELICAN	1.00	115.50	31.75	8.02	4.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.67	119.63	46.52	10.21	2.87
COEFFICIENT OF VARIATION		0.00	9.40	4.84	0.25	0.00
5% LSD VARIETY MEANS (*****=NS)		0.00	15.71	20.80	4.91	0.00
		0.00	26.82	13.80	0.72	0.00
C O R R E L A T I O N S (+ - PROB=.05 ** - PROB=.01)						
YIELD KG/HA		0.21	0.25	0.52	0.41	-0.42
DAYS TO FLOWER		0.17	-0.16	0.19	0.26	-0.19
DAYS TO MATURITY		0.07	-0.19	0.25	0.32	-0.07
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT		0.00	0.00	0.00	0.00	0.00
LODGING		-0.03	-0.20	0.21	0.17	0.18
SHATTER		0.07	-0.24	0.00	-0.04	-0.19
PLANTS HARVEST		1.00	-0.46	0.41	0.58	-0.06
PODS PFR		-0.46	1.00	0.02	-0.28	0.02
PLANT		0.41	0.02	1.00	0.59	-0.14
100 SEED WEIGHT		0.58	-0.28	0.59	1.00	-0.23
QUALITY OF SEED		-0.06	0.02	-0.14	-0.23	1.00

TABLE 52 EXPERIMENT 54

YEAR 1974

REGION - ASIA
 SITE - LA CARLOTA
 LATITUDE - 10 DEG. 24 MIN. N
 DATE PLANTED - JUNE 24, 1974
 SOIL TYPE - CLAY, PH 5.5
 FERTILIZER USED (KG/HA) - N 45.0, P 45.0, K 45.0

COUNTRY - PHILIPPINES
 COOPERATOR - R.M. PAYSON
 ELEVATION - 74 M
 DATE HARVESTED - OCTOBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
13	WILLIAMS	1894.96	30.00	92.00	70.00	119.50	0.34	1.79	54.48	1.00
3	HARDEE	1704.92	36.00	100.00	32.00	129.75	0.28	2.58	29.98	1.00
8	TRACY	1544.06	30.00	92.00	43.50	108.25	0.31	1.95	31.25	1.00
10	HILL	1531.97	32.00	92.00	24.50	64.50	0.31	1.48	35.50	1.00
7	DAVIS	1466.96	32.00	92.00	25.00	83.00	0.20	1.97	29.68	1.00
6	BRAGG	1447.37	30.00	92.00	46.00	145.00	0.21	1.68	34.15	1.00
14	CALLAND	1427.79	30.00	95.00	38.25	89.00	0.22	1.85	58.08	1.00
11	CLARK 63	1329.43	30.00	92.00	40.00	95.75	0.25	1.84	53.20	1.00
2	HAMPTON 266A	1325.68	30.00	92.00	39.50	142.25	0.24	1.83	29.75	1.00
12	BONUS	1303.59	30.00	92.00	50.00	106.00	0.30	1.65	50.18	1.00
4	IMPROVED PELICAN	1251.92	40.00	115.00	66.75	29.75	0.41	0.61	94.65	2.00
15	SEMME	1239.83	30.00	95.00	12.50	81.25	0.06	1.31	24.75	1.00
9	FORREST	1239.41	30.00	92.00	55.25	98.75	0.37	1.62	33.03	1.00
5	BOSSIER	1162.32	40.00	115.00	48.75	65.75	0.44	1.51	57.13	1.50
1	JUPITER	1119.39	40.00	115.00	56.75	67.50	0.56	1.21	74.48	2.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		1399.31	32.67	97.53	43.25	95.07	0.30	1.66	46.02	1.17
COEFFICIENT OF VARIATION		147.66	0.00	0.00	9.98	15.74	0.09	0.25	1.65	0.07
5% LSD VARIETY MEANS (*****=NS)		21.11%	0.00%	0.00%	46.15%	33.12%	57.02%	29.66%	7.19%	12.78%
		421.44	0.00	0.00	28.48	44.93	*****	0.70	4.72	0.21
C O R R E L A T I O N S (+ - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	-0.23	-0.30+	0.16	0.26+	-0.11	0.32+	-0.14	-0.40++
DAYS TO FLOWER		-0.23	1.00	0.96++	0.21	-0.45++	0.42++	-0.31+	0.63++	0.82++
DAYS TO MATURITY		-0.30+	0.96++	1.00	0.25+	-0.47++	0.42++	-0.39++	0.72++	0.87++
NODULE NUMBER 1		0.16	0.21	0.25+	1.00	0.23	0.66++	0.03	0.46++	0.28+
NODULE NUMBER 2		0.26+	-0.45++	-0.47++	0.23	1.00	-0.01	-0.76++	-0.48++	-0.52++
NODULE WEIGHT 1		-0.11	0.42++	0.42++	0.66++	-0.01	1.00	-0.00	0.41++	0.45++
NODULE WEIGHT 2		0.32+	-0.31+	-0.39++	0.03	0.76++	-0.00	1.00	-0.45++	-0.51++
PLANT	HEIGHT	-0.14	0.63++	0.72++	0.46++	-0.48++	0.41++	-0.45++	1.00	0.75++
LODGING		-0.40++	0.82++	0.87++	0.28+	-0.52++	0.45++	-0.51++	0.75++	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	-0.15	0.30+	0.30+	0.03	-0.29+	0.21	-0.20	0.24	0.31+
PODS PER	PLANT	-0.06	0.51++	0.45++	0.15	-0.18	0.14	-0.19	0.24	0.43++
100 SEED	WEIGHT	0.36++	-0.71++	-0.69++	-0.09	0.36++	-0.26+	0.40++	-0.38++	-0.64++
QUALITY	OF SEED	-0.40++	0.52++	0.65++	0.34++	-0.35++	0.42++	-0.29+	0.75++	0.61++

TABLE 52 EXPERIMENT 54 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
13	WILLIAMS	1.00	178.50	24.50	20.75	2.75	42.7	22.7
3	HARDEE	1.00	172.75	37.75	15.50	2.25	41.2	23.4
8	TRACY	1.00	184.50	21.00	19.75	2.25	42.3	21.2
10	HILL	1.00	203.50	23.50	16.25	2.25	40.2	22.7
7	DAVIS	1.00	187.50	28.25	14.25	2.00	39.3	23.0
6	BRAGG	1.00	183.00	27.00	16.00	2.25	42.2	22.8
14	CALLAND	1.00	186.25	22.25	21.00	4.50	42.1	22.0
11	CLARK 63	1.00	178.00	22.75	17.50	4.00	42.8	23.2
2	HAMPTON 266A	1.00	187.50	28.00	15.25	2.25	38.8	24.3
12	BONUS	1.00	191.50	22.25	17.00	2.75	42.6	22.5
4	IMPROVED PELICAN	1.00	195.25	38.75	8.75	5.00	42.5	22.4
15	SEMME	1.00	179.75	27.25	15.25	3.00	41.0	24.1
9	FORREST	1.00	184.00	33.00	13.00	3.25	41.3	22.0
5	BOSSIER	1.00	206.75	27.25	12.25	4.25	42.4	22.6
1	JUPIITER	1.00	198.25	31.50	9.00	5.00	41.7	21.2
	GRAND MEAN	1.00	187.80	27.67	15.43	3.18	41.5	22.7
	STANDARD ERROR OF A VARIETY MEAN	0.00	8.14	2.15	0.82	0.34		
	COEFFICIENT OF VARIATION	0.00%	8.67%	15.51%	10.57%	21.44%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	*****	6.12	2.33	0.97		
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)								
YIELD	KG/HA	0.00	-0.15	-0.06	0.36++	-0.40++		
DAYS TO FLOWER		0.00	0.30+	0.51++	-0.71++	0.52++		
DAYS TO MATURITY		0.00	0.30+	0.45++	-0.69++	0.65++		
NODULE NUMBER 1		0.00	0.03	0.15	-0.09	0.34++		
NODULE NUMBER 2		0.00	-0.29+	-0.18	0.36++	-0.35++		
NODULE WEIGHT 1		0.00	0.21	0.14	-0.26+	0.42++		
NODULE WEIGHT 2		0.00	-0.20	-0.19	0.40++	-0.29+		
PLANT	HEIGHT	0.00	0.24	0.24	-0.38++	0.75++		
LODGING		0.00	0.31+	0.43++	-0.64++	0.61++		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS	HARVEST	0.00	1.00	-0.02	-0.19	0.15		
PODS PER	PLANT	0.00	-0.02	1.00	-0.46++	0.16		
100 SEED	WEIGHT	0.00	-0.19	-0.46++	1.00	-0.32+		
QUALITY	OF SEED	0.00	0.15	0.16	-0.32+	1.00		

TABLE 53

EXPERIMENT 66

YEAR 1974

REGION - ASIA
 SITE - LOS BANOS
 LATITUDE - 14 DEG. 10 MIN. N
 DATE PLANTED - JUNE 18, 1974
 SOIL TYPE - CLAY
 FERTILIZER USED (KG/HA) - N 49.0, P 49.0, K 49.0
 AMOUNT OF MOISTURE - 1046 MM
 LOCAL VARIETIES - TK-5

COUNTRY - PHILIPPINES
 COOPERATOR - B.M. LEGASPI, R.R. MATIAS
 ELEVATION - 15 M
 DATE HARVESTED - SEPTEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
13	WILLIAMS	2128.43	23.00	78.00	77.00	249.75	0.04	0.29	61.25	1.00
11	CLARK 63	1996.61	23.00	78.75	80.50	183.75	0.04	0.31	59.25	1.50
3	HARDEE	1970.69	36.00	93.00	258.00	380.75	0.34	1.52	53.25	1.00
12	BONUS	1917.30	23.00	75.75	80.50	549.50	0.06	1.08	66.25	1.00
8	TRACY	1807.57	28.25	80.25	274.25	425.75	0.24	1.52	42.25	1.00
10	HILL	1743.02	30.00	76.50	143.00	289.00	0.13	0.85	36.50	1.00
14	CALLAND	1707.05	23.00	78.75	81.75	357.50	0.09	0.98	71.25	1.00
9	FORREST	1662.25	30.00	78.00	152.25	323.75	0.12	0.77	39.75	1.00
4	IMPROVED PELICAN	1461.92	37.75	94.50	356.75	242.00	0.51	1.03	105.25	2.00
7	DAVIS	1405.53	31.50	81.00	158.00	415.00	0.26	1.86	45.25	1.00
6	BAGG	1272.55	30.00	80.25	61.75	325.50	0.04	1.04	47.75	1.00
5	BOSSIER	1242.42	43.00	96.00	325.75	315.00	0.26	1.15	82.25	2.00
1	JUPITER	1075.17	41.25	99.00	145.75	245.25	0.15	0.94	83.00	1.75
15	TK-5	673.80	34.50	75.00	386.25	480.50	0.53	2.35	71.75	2.00
2	HAMPTON 266A	508.85	30.00	78.00	367.25	515.00	0.22	1.41	47.25	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		1504.88	30.95	82.85	196.58	353.20	0.20	1.14	60.82	1.28
COEFFICIENT OF VARIATION		92.33	0.96	0.79	56.88	72.51	0.07	0.29	2.49	0.10
5% LSD VARIETY MEANS (*****=NS)		12.27%	6.21%	1.90%	57.87%	41.06%	65.55%	51.01%	8.18%	15.68%
		263.52	2.74	2.25	162.33	206.94	0.19	0.83	7.10	0.29
C O R R E L A T I O N S										
				(+ - PROB=.05			++ - PROB=.01)			
YIELD	KG/HA	1.00	-0.46++	-0.08	-0.41++	-0.18	-0.29+	-0.37++	-0.19	-0.32+
DAYS TO FLOWER		-0.46++	1.00	0.78++	0.42++	-0.15	0.48++	0.22	0.41++	0.62++
DAYS TO MATURITY		-0.08	0.78++	1.00	0.20	-0.27+	0.26+	-0.04	0.57++	0.49++
NODULE NUMBER 1		-0.41++	0.42++	0.20	1.00	0.21	0.64++	0.46++	0.20	0.36++
NODULE NUMBER 2		-0.18	-0.15	-0.27+	0.21	1.00	0.16	0.80++	-0.16	-0.18
NODULE WEIGHT 1		-0.29+	0.48++	0.26+	0.64++	0.16	1.00	0.49++	0.31+	0.46++
NODULE WEIGHT 2		-0.37++	0.22	-0.04	0.46++	0.80++	0.49++	1.00	-0.03	0.11
PLANT HEIGHT		-0.19	0.41++	0.57++	0.20	-0.16	0.31+	-0.03	1.00	0.70++
LODGING		-0.32+	0.62++	0.49++	0.36++	-0.18	0.46++	0.11	0.70++	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.03	-0.16	-0.35++	-0.01	-0.05	-0.13	-0.12	-0.21	-0.13
PODS PER PLANT		0.47++	0.17	0.43++	-0.12	-0.11	0.05	-0.07	0.16	0.08
100 SEED WEIGHT		0.55++	-0.52++	-0.25	-0.37++	-0.09	-0.44++	-0.35++	-0.19	-0.39++
QUALITY OF SEED		-0.61++	0.30+	0.08	0.20	0.05	0.29+	0.27+	0.22	0.28+

TABLE 53 EXPERIMENT 66 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
13	WILLIAMS	1.00	185.50	30.48	13.50	1.75	37.0	22.9
11	CLARK 63	1.00	195.75	34.65	11.60	1.75	35.8	23.2
3	HARDEE	1.00	176.00	53.98	10.53	2.00	40.1	21.0
12	BONUS	1.00	207.00	30.08	12.60	2.00	37.6	22.7
8	TRACY	1.00	200.75	29.98	13.25	1.75	39.4	20.8
10	HILL	1.00	228.00	26.53	11.70	1.50	38.1	22.4
14	CALLAND	1.00	185.25	33.28	11.98	3.00	37.9	21.3
9	FORREST	1.00	206.75	29.73	9.13	2.25	39.4	19.7
4	IMPROVED PELICAN	1.00	183.75	33.08	9.13	2.50	39.3	22.3
7	DAVIS	1.00	180.00	29.50	9.38	3.00	39.5	20.8
6	BRAGG	1.00	181.50	24.85	10.58	2.00	38.9	20.9
5	BOSSIER	1.00	196.75	26.58	9.67	2.00	42.1	20.8
1	JUPITER	1.00	177.00	43.38	10.93	3.00	41.1	20.5
15	TK-5	1.00	192.25	27.13	9.38	3.50	42.5	18.8
2	HAMPTON 266A	1.00	192.75	15.45	9.88	3.00	39.4	20.7
	GRAND MEAN	1.00	192.60	31.24	10.88	2.33	39.2	21.3
	STANDARD ERROR OF A VARIETY MEAN	0.00	9.34	3.79	0.42	0.21		
	COEFFICIENT OF VARIATION	0.00%	9.70%	24.28%	7.77%	18.23%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	26.66	10.83	1.21	0.61		
C O R R E L A T I O N S								
				(+ - PROB=.05		++ - PROB=.01)		
YIELD	KG/HA	0.00	0.03	0.47++	0.55++	-0.61++		
DAYS TO FLOWER		0.00	-0.16	0.17	-0.52++	0.30+		
DAYS TO MATURITY		0.00	-0.35++	0.43++	-0.25	0.08		
NODULE NUMBER 1		0.00	-0.01	-0.12	-0.37++	0.20		
NODULE NUMBER 2		0.00	-0.05	-0.11	-0.09	0.05		
NODULE WEIGHT 1		0.00	-0.13	0.05	-0.44++	0.29+		
NODULE WEIGHT 2		0.00	-0.12	-0.07	-0.35++	0.27+		
PLANT HEIGHT		0.00	-0.21	0.16	-0.19	0.22		
LODGING		0.00	-0.13	0.08	-0.39++	0.28+		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	-0.29+	0.03	-0.22		
PODS PER PLANT		0.00	-0.29+	1.00	0.13	-0.14		
100 SEED WEIGHT		0.00	0.03	0.13	1.00	-0.35++		
QUALITY OF SEED		0.00	-0.22	-0.14	-0.35++	1.00		

TABLE 54

EXPERIMENT 99

YEAR 1974

REGION - ASIA
 SITE - ALUTHARAMA
 LATITUDE - 7 DEG. 30 MIN. N
 DATE PLANTED - MAY 21, 1974
 SOIL TYPE - SANDY LOAM, PH 6.4
 FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
 AMOUNT OF MOISTURE - 127 MM
 NUMBER OF IRRIGATIONS - 21
 LOCAL VARIETIES - PB-1, S.J.2

COUNTRY - SRI LANKA
 COOPERATOR - B.N. EMERSON
 ELEVATION - 269 M
 DATE HARVESTED - AUGUST, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
6	BRAGG	2011.67	23.25	82.25	156.00	314.25	0.38	1.65	40.00	1.00
11	CLARK 63	1788.11	20.50	82.00	184.75	195.75	0.57	1.09	43.75	1.00
7	DAVIS	1760.18	29.25	80.75	147.25	360.25	0.62	1.77	40.75	1.00
8	TRACY	1665.09	24.50	81.50	209.00	266.75	0.58	1.54	33.25	1.00
13	WILLIAMS	1647.60	24.00	76.00	287.50	342.75	0.83	1.70	49.00	1.00
2	HAMPTON 266A	1641.44	25.00	80.50	234.25	284.00	0.79	1.32	32.50	1.00
9	FORREST	1567.04	23.00	80.50	180.75	273.00	0.55	1.29	37.50	1.00
12	BONUS	1413.75	20.25	80.50	112.75	191.25	0.37	1.08	43.00	1.00
4	IMPROVED PELICAN	1383.16	30.50	87.75	164.00	217.00	0.46	0.74	73.25	1.00
1	JUPITER	1351.80	34.00	121.25	174.75	287.25	0.73	1.36	70.25	1.00
14	PB-1	1293.05	34.00	82.25	157.50	311.75	0.73	1.40	52.25	2.50
10	HILL	1292.67	29.75	76.25	175.00	266.75	0.76	1.61	38.25	1.00
3	HARDEE	1261.98	32.00	83.25	222.50	349.00	0.91	1.57	44.75	1.00
15	S.J.2	1138.18	33.50	89.00	114.00	173.00	0.96	0.84	67.25	2.75
5	BOSSIER	1070.87	30.75	95.50	226.00	363.00	0.96	2.10	47.25	1.25
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		1485.77	27.62	85.28	183.07	279.72	0.68	1.40	47.53	1.23
COEFFICIENT OF VARIATION		143.14	1.85	0.61	28.91	40.88	0.18	0.27	1.61	0.11
5% LSD VARIETY MEANS (*****=NS)		19.27%	13.41%	1.43%	31.59%	29.23%	52.52%	38.83%	6.78%	18.42%
		408.52	5.29	1.73	82.51	116.68	*****	*****	4.60	0.32
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	-0.48++	-0.24	0.03	0.13	-0.26+	0.07	-0.25	-0.34++
DAYS TO FLOWER		-0.48++	1.00	0.41++	0.09	0.13	0.42++	0.02	0.46++	0.46++
DAYS TO MATURITY		-0.24	0.41++	1.00	-0.07	0.00	0.10	-0.03	0.61++	0.04
NODULE NUMBER 1		0.03	0.09	-0.07	1.00	0.54++	0.53++	0.37++	-0.14	-0.24
NODULE NUMBER 2		0.13	0.13	0.00	0.54++	1.00	0.33++	0.58++	-0.18	-0.16
NODULE WEIGHT 1		-0.26+	0.42++	0.10	0.53++	0.33++	1.00	0.26+	0.12	0.26+
NODULE WEIGHT 2		0.07	0.02	-0.03	0.37++	0.58++	0.26+	1.00	-0.27+	-0.13
PLANT HEIGHT		-0.25	0.46++	0.61++	-0.14	-0.18	0.12	-0.27+	1.00	0.38++
LODGING		-0.34++	0.46++	0.04	-0.24	-0.16	0.26+	-0.13	0.38++	1.00
SHATTER		-0.24	0.36++	-0.02	-0.15	0.01	0.04	-0.10	0.24	0.72++
HARVEST		0.21	-0.12	-0.56++	0.06	0.08	-0.00	0.17	-0.29+	0.06
PLANTS PER 100 SEED		-0.03	0.17	0.20	-0.31+	-0.03	-0.08	-0.18	0.42++	0.26+
PLANT WEIGHT		0.29+	-0.31+	0.33++	0.08	-0.07	-0.10	-0.03	-0.05	-0.45++
QUALITY OF SEED		0.18	-0.27+	-0.19	0.08	-0.06	-0.09	0.01	-0.42++	-0.19

TABLE 54 EXPERIMENT 99 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
6	BRAGG	1.00	203.50	31.95	12.25	2.00	42.9	22.4
11	CLARK 63	1.00	205.50	25.78	16.25	1.00	40.5	23.6
7	DAVIS	1.00	204.75	27.70	14.25	1.00	41.6	20.9
8	TRACY	1.00	203.75	28.23	14.75	5.00	42.5	21.1
13	WILLIAMS	1.00	204.00	17.65	15.75	1.00	42.8	23.3
2	HAMPTON 266A	1.00	204.25	22.68	15.13	3.00	39.9	25.7
12	FORREST	1.00	202.75	27.28	10.38	3.25	41.2	22.0
4	BONUS	1.00	203.75	25.30	16.75	1.00	43.8	23.3
4	IMPROVED PELICAN	1.00	205.25	37.22	10.63	1.75	41.8	22.9
1	JUPITER	1.00	197.75	28.25	18.95	1.00	45.7	23.4
14	PB-1	2.00	206.25	35.10	9.63	1.00	43.6	19.0
10	HILL	1.00	206.25	24.05	12.13	1.25	40.7	22.4
3	HARDEE	1.00	202.75	35.05	11.25	1.00	42.9	23.1
15	S.J.2	1.50	203.00	31.65	10.50	1.25	42.9	20.5
5	BOSSIER	1.00	204.00	30.58	11.63	1.25	42.7	23.5
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN			203.83	28.56	13.35	1.72	42.4	22.5
COEFFICIENT OF VARIATION			1.13	2.24	0.42	0.18		
5% LSD VARIETY MEANS (*****=NS)			13.55%	15.67%	6.30%	21.21%		
			0.21	6.39	1.20	0.52		
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)								
YIELD KG/HA								
DAYS TO FLOWER	-0.24	0.21	-0.03	0.29+	0.18			
DAYS TO MATURITY	0.36++	-0.12	0.17	-0.31+	-0.27+			
NODULE NUMBER 1	-0.02	-0.56++	0.20	0.33++	-0.19			
NODULE NUMBER 2	-0.15	0.06	-0.31+	0.08	0.08			
NODULE WEIGHT 1	0.01	0.08	-0.03	-0.07	-0.06			
NODULE WEIGHT 2	0.04	-0.00	-0.08	-0.10	-0.09			
PLANT HEIGHT	-0.10	0.17	-0.18	-0.03	0.01			
LODGING	0.24	-0.29+	0.42++	-0.05	-0.42++			
SHATTER	0.72++	0.06	0.26+	-0.45++	-0.19			
HARVEST	1.00	0.12	0.27+	-0.42++	-0.20			
PLANTS PER PLANT	0.12	1.00	-0.04	-0.29+	-0.01			
100 SEED WEIGHT	0.27+	-0.04	1.00	-0.44++	-0.09			
QUALITY OF SEED	-0.42++	-0.29+	-0.09	1.00	-0.03			
	-0.20	-0.01	-0.09	-0.03				

TABLE 55

EXPERIMENT 120

YEAR 1974

REGION - ASIA
 SITE - ALUTHARAMA
 LATITUDE - 7 DEG. 30 MIN. N
 DATE PLANTED - NOVEMBER 14, 1974
 SOIL PH 6.4
 FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
 AMOUNT OF MOISTURE - 1017 MM
 NUMBER OF IRRIGATIONS - 4
 LOCAL VARIETIES - PB-1, S.J.2

COUNTRY - SRI LANKA
 COOPERATOR - S.M. SANTHRASIVAM
 ELEVATION - 266 M
 DATE HARVESTED - FEBRUARY, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	BOSSIER	2856.61	37.25	97.00	245.00	442.75	0.51	2.34	43.58	1.00
1	JUPITER	2637.03	42.00	104.00	166.25	283.50	0.43	1.66	66.07	2.00
3	HARDEE	2575.97	31.00	100.00	172.75	358.00	0.63	2.63	30.75	1.50
7	DAVIS	2571.93	30.50	105.50	184.25	341.00	0.57	2.59	27.58	1.00
15	S.J.2	2432.24	35.00	96.50	190.00	430.25	0.43	1.95	58.23	2.75
14	IMPROVED PELICAN	2383.89	31.75	96.00	126.25	442.75	0.46	2.37	69.35	3.00
11	PB-1	2250.91	31.75	87.00	147.75	529.00	0.38	2.91	43.05	2.50
11	CLARK 63	2171.43	28.75	90.25	148.00	461.25	0.40	2.09	52.05	2.25
9	FORREST	2169.43	29.00	95.00	151.25	325.75	0.38	1.99	31.55	1.50
13	WILLIAMS	2097.79	27.25	87.50	221.00	394.00	0.71	2.51	45.18	1.50
6	BRAGG	1967.44	26.75	96.00	190.75	450.25	0.53	2.41	32.85	1.50
2	HAMPTON 266A	1940.30	27.50	98.50	225.25	422.25	0.53	2.43	27.55	1.00
10	HILL	1793.61	30.50	89.00	143.00	352.75	0.53	2.09	36.58	2.75
12	BONUS	1586.32	27.50	88.00	159.75	458.50	0.55	2.28	36.80	1.25
8	TRACY	1462.00	27.25	89.25	184.25	345.25	0.81	2.24	31.35	1.50
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2193.13	30.92	94.63	177.03	402.48	0.52	2.30	42.17	1.80
COEFFICIENT OF VARIATION		122.53	0.68	1.54	20.54	50.73	0.09	0.28	1.98	0.25
5% LSD VARIETY MEANS (*****=NS)		11.17%	4.40%	3.26%	23.21%	25.21%	35.07%	23.92%	9.41%	27.38%
		349.71	1.94	4.40	58.63	*****	*****	*****	5.66	0.70
C O R R E L A T I O N S										
		(+ - PROB=.05 +- - PROB=.01)								
YIELD	KG/HA	1.00								
DAYS TO FLOWER	0.60++	0.56++								
DAYS TO MATURITY	1.00	0.46++	0.09	-0.03	-0.24	0.01	0.39++	0.05		
NODULE NUMBER 1	0.56++	0.46++	0.06	-0.16	-0.24	-0.24	0.26++	0.20		
NODULE NUMBER 2	0.09	0.10	0.10	-0.19	-0.18	-0.06	0.08	-0.21		
NODULE WEIGHT 1	-0.03	0.06	1.00	0.07	0.48++	0.10	-0.27+	0.30+		
NODULE WEIGHT 2	-0.24	-0.16	0.07	1.00	-0.01	0.38++	0.09	0.09		
NODULE PLANT	0.01	-0.26+	0.48++	-0.01	1.00	0.25	-0.26+	-0.13		
HEIGHT	0.39++	0.55++	0.10	0.38++	0.25	1.00	-0.24	-0.04		
LODGING	0.05	0.08	-0.27+	0.09	-0.26+	-0.24	1.00	0.55++		
SHATTER	0.11	0.20	-0.30+	0.09	-0.13	-0.04	0.00	1.00		
PLANTS	0.13	0.03	-0.05	0.25	-0.07	0.00	0.03	0.03		
PODS PER PLANT	-0.13	-0.01	-0.29+	0.30+	-0.15	0.01	0.02	0.02		
100 SEED WEIGHT	0.68++	0.65++	-0.08	-0.06	-0.22	-0.02	0.33++	0.02		
QUALITY OF SEED	-0.04	0.30+	-0.34++	-0.25+	0.30+	-0.05	-0.35++	-0.60++		
	-0.13	-0.09	-0.15	0.10	-0.09	-0.09	-0.04	-0.13		

TABLE 55 EXPERIMENT 120 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
5	BOSSIER	1.00	200.25	20.25	21.14	2.00	43.5	24.0
1	JUPITER	1.00	199.75	28.00	22.42	2.00	42.0	25.2
3	HARDEE	1.00	199.50	23.25	19.88	2.00	41.3	25.4
7	DAVIS	1.00	199.25	17.75	23.19	2.00	43.0	23.5
15	S.J.2	1.00	200.25	23.50	15.18	2.00	42.3	23.6
4	IMPROVED PELICAN	1.00	199.75	23.25	16.89	2.00	43.8	24.0
14	PB-1	1.25	200.00	22.75	14.66	2.00	44.0	20.4
11	CLARK 63	1.00	201.00	13.25	19.76	2.00	40.9	24.1
9	FORREST	1.00	200.25	18.25	18.30	2.00	41.4	24.5
13	WILLIAMS	1.00	199.25	13.00	22.72	2.00	41.6	24.8
6	BAGG	1.00	200.00	13.75	22.86	2.00	41.9	22.7
2	HAMPTON 266A	1.00	199.75	15.25	23.68	2.00	41.0	25.6
10	HILL	1.00	200.00	15.50	19.25	2.00	39.6	24.0
12	BONUS	1.00	200.75	12.50	20.61	2.25	42.1	24.7
8	TRACY	1.00	200.00	12.25	21.45	2.00	42.6	22.1
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.02	199.98	18.17	20.13	2.02	42.1	23.9
COEFFICIENT OF VARIATION		0.06	0.50	1.60	0.42	0.06		
5% LSD VARIETY MEANS (*****=NS)		12.70%	0.50%	17.66%	4.14%	6.40%		
		*****	*****	4.58	1.19	*****		
C O R R E L A T I O N S (+ - PROB=-.05 + + - PROB=.01)								
YIELD	KG/HA	0.11	-0.13	0.68++	-0.04	-0.13		
DAYS TO FLOWER		0.03	-0.01	0.65++	-0.18	-0.09		
DAYS TO MATURITY		-0.20	-0.29+	0.45++	0.30+	-0.20		
NODULE NUMBER 1		-0.05	-0.08	-0.08	0.34++	-0.15		
NODULE NUMBER 2		0.25	0.30+	-0.06	-0.25+	0.10		
NODULE WEIGHT 1		-0.07	-0.15	-0.22	0.30+	-0.09		
NODULE WEIGHT 2		0.00	0.01	-0.02	-0.05	-0.09		
PLANT	HEIGHT	0.00	0.02	0.50++	-0.35++	-0.04		
LODGING		0.03	0.02	0.33++	-0.60++	-0.13		
SHATTER		1.00	0.00	0.09	-0.24	-0.02		
PLANTS	HARVEST	0.00	1.00	-0.10	-0.18	0.40++		
PODS PER PLANT		0.09	-0.10	1.00	-0.31+	-0.09		
100 SEED WEIGHT		-0.24	-0.18	-0.31+	1.00	0.01		
QUALITY OF SEED		-0.02	0.40++	-0.09	0.01	1.00		

TABLE 56

EXPERIMENT 100

YEAR 1974

REGION - ASIA
 SITE - ANGUNKOLAPALESSA
 LATITUDE - 6 DEG. 20 MIN. N
 DATE PLANTED - MAY 29, 1974
 SOIL TYPE - SAND 58.4%, CLAY 41.6%, PH 6.0
 FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
 AMOUNT OF MOISTURE - 757 MM
 NUMBER OF IRRIGATIONS - 12
 LOCAL VARIETIES - PB-1, S.J.2

COUNTRY - SRI LANKA
 COOPERATOR - I.P.S. DIAS
 ELEVATION - 25 M
 DATE HARVESTED - SEPTEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
7	DAVIS	2473.86	27.00	84.50	121.25	230.50	0.63	2.68	31.08	1.00
4	IMPROVED PELICAN	2383.50	32.25	88.25	62.50	112.50	0.38	1.89	70.52	2.50
15	S.J.2	2303.89	32.00	96.75	69.50	116.25	0.23	1.73	60.03	3.25
14	PB-1	2278.41	32.00	82.25	128.25	264.00	1.17	5.29	48.78	1.50
5	BOSSIER	2276.13	32.50	96.50	98.75	265.25	0.58	3.55	37.60	1.50
6	BRAGG	2190.73	26.50	83.75	83.00	271.25	0.41	2.70	28.43	1.00
13	WILLIAMS	2112.89	26.00	77.25	115.25	255.00	0.55	2.75	52.23	1.00
1	JUPITER	1957.72	36.50	103.00	11.50	125.75	0.24	2.25	51.43	3.75
12	BONUS	1753.25	26.00	88.00	32.75	105.75	0.15	1.14	45.08	2.00
9	FORREST	1643.48	26.50	81.50	23.75	120.50	0.25	1.24	25.23	1.00
11	CLARK 63	1615.06	32.25	73.00	102.75	127.75	1.17	2.78	49.30	1.75
3	HARDEE	1443.41	31.00	89.75	139.00	367.50	0.90	4.39	23.35	1.00
10	HILL	1291.14	27.25	72.50	22.75	89.25	0.10	1.41	21.40	1.00
2	HAMPTON 266A	1282.18	26.25	85.25	94.50	89.75	0.39	0.86	22.60	1.00
8	TRACY	960.48	26.00	74.00	74.25	87.75	0.25	0.94	19.40	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
(+ - PROB=-.05 +- - PROB=-.01) C O R R E L A T I O N S										
YIELD	KG/HA	1.00	0.22	0.27+	0.36++	0.37++	0.24	0.31+	0.54++	0.29+
DAYS TO FLOWER	0.22	1.00	0.58++	0.27+	0.03	0.11	0.24	0.33++	0.53++	0.67++
DAYS TO MATURITY	0.27+	0.58++	1.00	0.58++	-0.11	0.12	-0.13	0.11	0.32+	0.57++
NODULE NUMBER 1	0.36++	0.03	0.03	0.11	1.00	0.56++	0.76++	0.53++	0.06	-0.26+
NODULE NUMBER 2	0.37++	0.11	0.12	0.56++	0.56++	1.00	0.51++	0.87++	-0.01	-0.18
NODULE WEIGHT 1	0.24	0.24	0.11	0.13	0.76++	0.51++	1.00	0.67++	0.15	-0.15
NODULE WEIGHT 2	0.31+	0.33++	0.11	0.53++	0.53++	0.87++	0.67++	1.00	0.11	-0.05
PLANT	0.54++	0.32+	0.32+	0.06	0.06	-0.01	0.15	0.11	1.00	0.66++
HEIGHT	0.29+	0.67++	0.57++	0.26+	-0.26+	-0.18	-0.15	-0.05	0.66++	1.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	0.76++	0.24	0.05	0.05	0.40++	0.31+	0.31+	0.28+	0.58++	0.25
PODS PER PLANT	-0.00	0.45++	0.05	0.42++	-0.23	-0.07	-0.08	0.02	0.27+	0.40++
100 SEED WEIGHT	-0.18	-0.40++	0.05	0.05	-0.06	0.01	-0.18	-0.22	-0.47++	-0.30+
QUALITY OF SEED	-0.23	-0.15	0.09	0.09	-0.06	-0.06	-0.17	-0.16	-0.47++	-0.11

TABLE 56 EXPERIMENT 100 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
7	DAVIS	1.00	97.25	52.90	23.25	2.00	44.5	23.0
4	IMPROVED PELICAN	1.00	123.00	65.67	15.88	2.50	46.0	22.1
15	S.J.2	1.00	100.25	72.37	15.75	2.25	46.1	21.5
14	PB-1	1.00	104.00	72.30	12.25	1.75	44.8	21.1
5	BOSSIER	1.00	110.50	55.30	20.38	2.00	45.7	22.1
6	BAGG	1.00	77.25	49.47	24.00	2.25	44.9	23.0
13	WILLIAMS	1.00	100.25	48.67	21.50	2.00	40.9	26.1
9	JUPITER	1.00	73.25	79.77	20.63	1.75	45.1	23.8
12	BONUS	1.00	50.50	76.15	21.25	2.50	43.7	24.4
9	FORREST	1.00	63.75	52.02	18.63	2.25	41.5	23.9
11	CLARK 63	1.00	83.25	57.92	18.13	2.00	44.7	22.8
3	HARDEE	1.00	37.25	79.75	21.00	2.25	47.2	24.4
10	HILL	1.00	69.25	48.55	17.63	2.00	40.2	23.8
2	HAMPTON 266A	1.00	41.50	42.57	24.13	2.50	43.6	24.7
8	TRACY	1.00	38.00	42.32	22.50	2.00	45.2	22.5
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	77.95	59.72	19.79	2.13	44.3	23.3
COEFFICIENT OF VARIATION		0.00	17.70	6.81	1.21	0.24		
5% LSD VARIETY MEANS (*****=NS)		0.00	45.42%	22.82%	12.20%	22.29%		
		0.00	50.53	19.44	3.45	*****		
C O R R E L A T I O N S								
				(+ - PROB=.05		++ - PROB=.01)		
YIELD		0.00	0.76++	-0.00	-0.18	-0.23		
DAYS TO FLOWER		0.00	0.24	0.45++	-0.40++	-0.15		
DAYS TO MATURITY		0.00	0.05	0.42++	0.05	0.09		
NODULE NUMBER 1		0.00	0.40++	-0.23	-0.06	-0.06		
NODULE NUMBER 2		0.00	0.31+	-0.07	0.01	-0.06		
NODULE WEIGHT 1		0.00	0.31+	-0.08	-0.17	-0.17		
NODULE WEIGHT 2		0.00	0.28+	0.02	-0.22	-0.16		
PLANT		0.00	0.58++	0.27+	-0.47++	-0.02		
LODGING		0.00	0.25	0.40++	-0.30+	-0.11		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	-0.33++	-0.33++	-0.10		
PODS PER PLANT		0.00	-0.33++	1.00	-0.23	-0.12		
100 SEED WEIGHT		0.00	-0.33++	-0.23	1.00	0.16		
QUALITY OF SEED		0.00	-0.10	-0.12	0.16	1.00		

TABLE 57

EXPERIMENT 125

YEAR 1974

REGION - ASIA
 SITE - ANGUNUKOLAPALESSA
 LATITUDE - 6 DEG. 20 MIN. N
 DATE PLANTED - OCTOBER 24, 1974
 SOIL PH 6.0
 FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
 AMOUNT OF MOISTURE - 1466 MM
 NUMBER OF IRRIGATIONS - 20
 LOCAL VARIETIES - PB-1, S.J.2

COUNTRY - SRI LANKA
 COOPERATOR - A. SENTHINATHAN, S. KUMARAK-
 ULASINGHAM
 DATE HARVESTED - DECEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
6	BRAGG	3072.70	21.25	81.00	57.50	186.00	0.09	1.37	38.48	1.75
1	JUPIER	3062.28	28.50	92.50	76.50	183.50	0.30	0.79	80.70	3.00
7	DAVIS	2907.25	23.00	81.50	106.00	125.75	0.22	1.22	32.70	1.00
5	BOSSIER	2872.24	28.00	83.25	110.50	175.50	0.46	1.14	58.80	2.00
2	HAMPTON 266A	2830.57	22.50	79.50	80.00	102.50	0.12	0.89	34.78	1.00
9	FORREST	2646.36	22.00	77.00	45.00	99.25	0.06	0.81	36.63	1.25
13	WILLIAMS	2600.10	21.00	77.00	136.00	240.75	0.27	2.20	46.63	1.00
3	HARDEE	2436.32	24.50	81.50	93.00	253.00	0.38	2.24	35.58	1.00
10	HILL	2381.73	24.00	72.00	103.25	129.00	0.29	1.50	41.50	2.25
14	PB-1	2289.21	26.00	73.50	59.25	168.50	0.24	0.79	55.38	4.00
11	CLARK 63	2215.44	21.00	76.25	80.50	121.25	0.15	1.41	47.83	1.25
15	S.J.2	2010.82	25.75	80.50	85.75	158.75	0.27	1.38	62.48	3.25
12	BONUS	1962.89	21.00	73.00	66.25	126.50	0.13	1.16	46.33	1.00
8	TRACY	1839.12	21.25	73.75	79.50	139.50	0.13	1.26	35.30	1.25
4	IMPROVED PELICAN	1768.69	26.75	78.50	41.50	66.00	0.32	0.54	47.95	2.50
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	0.11	0.49++	0.31+	0.48++	0.27+	0.32+	0.09	-0.09
DAYS TO FLOWER	0.11	1.00	0.55++	0.55++	0.03	0.12	0.55++	-0.15	0.62++	0.66++
DAYS TO MATURITY	0.49++	0.49++	1.00	1.00	0.03	0.20	0.25	-0.03	0.48++	0.15
NODULE NUMBER 1	0.31+	0.31+	0.03	0.03	1.00	0.56++	0.68++	0.49++	-0.02	-0.17
NODULE NUMBER 2	0.48++	0.48++	0.12	0.20	0.56++	1.00	0.55++	0.85++	0.11	-0.04
NODULE WEIGHT 1	0.27+	0.27+	0.55++	0.25	0.68++	0.55++	1.00	0.39++	0.25	0.19
NODULE WEIGHT 2	0.32+	0.32+	-0.15	-0.03	0.49++	0.85++	0.39++	1.00	-0.09	-0.31+
PLANT HEIGHT	0.09	0.09	0.62++	0.48++	-0.02	0.11	0.25	-0.09	1.00	0.61++
LODGING	-0.09	-0.09	0.66++	0.15	-0.17	-0.04	0.19	-0.31+	0.61++	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.19	0.19	-0.19	-0.28+	-0.04	-0.08	-0.17	0.01	0.05	0.18
PODS PER PLANT	0.46++	0.46++	0.58++	0.48++	0.10	0.26+	0.29+	-0.06	0.52++	0.54++
100 SEED WEIGHT	0.37++	0.37++	-0.43++	0.18	0.21	0.21	-0.11	0.22	-0.19	-0.53++
QUALITY OF SEED	-0.27+	-0.27+	-0.21	-0.22	0.04	0.02	-0.10	0.04	-0.21	-0.19

TABLE 57 EXPERIMENT 125 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
6	BRAGG	0.00	201.00	23.73	21.00	2.00	43.7	24.4
1	JUPITER	0.00	186.50	38.63	19.25	2.00	40.8	27.1
7	DAVIS	0.00	190.25	25.13	17.13	2.00	41.8	24.0
5	BOSSIER	0.00	186.75	22.95	18.00	2.00	41.5	26.2
2	HAMPTON 266A	0.00	202.25	24.10	21.00	2.00	41.4	25.8
9	FORREST	0.00	208.75	23.63	16.75	2.00	41.2	25.1
13	WILLIAMS	0.00	212.50	17.50	21.00	2.00	41.1	25.2
3	HARDEE	0.00	172.50	22.08	17.50	2.00	41.2	26.3
10	HILL	0.00	210.25	22.50	16.38	2.00	39.6	25.2
14	PB-1	0.00	211.75	34.95	12.13	2.00	44.1	20.9
11	CLARK 63	0.00	203.50	16.53	18.00	2.00	39.1	26.7
15	S.J.2	0.00	209.00	27.85	14.00	2.00	41.8	22.9
12	BONDS	0.00	197.25	20.03	17.88	2.00	42.4	26.0
8	TRACY	0.00	179.00	16.90	20.38	2.75	44.3	22.3
4	IMPROVED PELICAN	0.00	191.75	20.38	12.00	2.00	42.4	25.1
	GRAND MEAN	0.00	197.53	23.79	17.49	2.05	41.8	24.9
	STANDARD ERROR OF A VARIETY MEAN	0.00	9.26	2.26	0.80	0.06		
	COEFFICIENT OF VARIATION	0.00%	9.38%	19.02%	9.10%	6.30%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	*****	6.46	2.27	0.18		
C O R R E L A T I O N S								
			(+ - PROB=.05	++ - PROB=.01)				
YIELD	KG/HA	0.00	0.19	0.46++	0.37++	-0.27+		
DAYS TO FLOWER		0.00	-0.19	0.58++	-0.43++	-0.21		
DAYS TO MATURITY		0.00	-0.28+	0.48++	0.18	-0.22		
NODULE NUMBER 1		0.00	-0.04	0.10	0.21	0.04		
NODULE NUMBER 2		0.00	-0.08	0.26+	0.21	0.02		
NODULE WEIGHT 1		0.00	-0.17	0.29+	-0.11	-0.10		
NODULE WEIGHT 2		0.00	0.01	-0.06	0.22	0.04		
PLANT	HEIGHT	0.00	0.05	0.52++	-0.19	-0.21		
LODGING		0.00	0.18	0.54++	-0.53++	-0.19		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS	HARVEST	0.00	1.00	0.01	-0.09	-0.31+		
PODS PER PLANT		0.00	0.01	1.00	-0.18	-0.23		
100 SEED WEIGHT		0.00	-0.09	-0.18	1.00	0.20		
QUALITY OF SEED		0.00	-0.31+	-0.23	0.20	1.00		

TABLE 58	EXPERIMENT 96	YEAR 1974
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REGION - ASIA
SITE - BANDIRIPPUWA
LATITUDE - 7 DEG. 10 MIN. N
DATE PLANTED - MAY 17, 1974
SOIL TYPE - SAND
FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
AMOUNT OF MOISTURE - 640 MM
LOCAL VARIETIES - PB-1, S.J.2
COUNTRY - SRI LANKA
COOPERATOR - M. MARTIN, J. JAYAMANNA
ELEVATION - 9 M
DATE HARVESTED - AUGUST, 1974

[illegible]

TABLE 58 EXPERIMENT 96 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
12	BONUS	1.00	190.50	8.13	20.24	3.25	38.4	28.3
2	HAMPTON 266A	1.00	186.50	10.95	14.53	1.50	32.3	30.0
10	HILL	1.00	196.00	8.83	17.01	2.00	33.0	28.4
8	TRACY	1.00	190.75	8.30	18.95	2.00	39.3	25.1
7	DAVIS	1.00	193.00	9.45	13.45	2.00	34.7	29.1
9	FORREST	1.00	195.50	11.25	18.85	2.25	33.3	27.6
13	WILLIAMS	1.00	183.75	6.98	13.07	3.00	35.6	28.8
5	BOSSIER	1.25	188.25	11.45	17.87	2.50	38.9	27.1
11	CLARK 63	1.25	191.00	10.53	16.73	2.00	35.8	25.6
1	JUPITER	1.00	195.25	6.00	22.91	5.00	48.0	22.5
3	HARDEE	1.25	194.25	11.88	10.63	2.00	37.8	27.5
6	BRAGG	1.00	184.25	8.72	14.33	2.50	33.4	29.9
14	PB-1	1.75	193.75	12.95	10.51	2.25	40.2	23.3
15	S.J.2	1.75	188.75	11.28	10.72	2.00	33.6	26.5
4	IMPROVED PELICAN	1.00	193.50	10.23	10.27	2.75	36.3	26.9
	GRAND MEAN	1.15	191.00	9.79	15.34	2.50	36.7	27.1
	STANDARD ERROR OF A VARIETY MEAN	0.14	3.89	1.44	2.61	0.35		
	COEFFICIENT OF VARIATION	23.88%	4.07%	29.38%	34.03%	27.69%		
	5% LSD VARIETY MEANS (*****=NS)	0.39	*****	*****	7.45	0.99		
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)								
YIELD	KG/HA	-0.17	-0.05	0.08	0.29+	-0.06		
DAYS TO FLOWER		0.21	0.17	0.05	0.03	0.36++		
DAYS TO MATURITY		-0.09	0.12	-0.14	0.12	0.52++		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT		0.00	0.00	0.00	0.00	0.00		
LODGING		0.28+	0.00	0.09	0.02	0.40+		
SHATTER		0.30+	0.00	0.05	-0.11	0.10		
PLANTS HARVEST		1.00	0.0	0.38++	-0.34++	-0.07		
PODS PER PLANT		0.0	1.00	-0.13	-0.06	0.11		
100 SEED WEIGHT		0.38++	-0.13	1.00	-0.24	-0.31+		
QUALITY OF SEED		-0.34++	-0.06	-0.24	1.00	0.27+		
		-0.07	0.11	-0.31+	0.27+	1.00		

TABLE 59 EXPERIMENT 122 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
9	FORREST	1.00	200.00	5.62	14.89	1.00	36.6	25.2
14	PR-1	1.00	200.00	7.42	11.24	1.00	41.5	21.9
15	S.J.2	2.00	200.00	7.03	11.06	1.00	39.0	24.3
11	CLARK 63	1.00	192.25	4.32	16.93	1.00	40.4	24.7
5	ROSSIER	1.50	196.00	6.45	17.48	1.00	37.4	25.3
3	HARDEE	1.00	190.75	4.15	15.12	1.00	38.3	26.2
4	IMPROVED PELICAN	1.00	196.25	5.48	12.90	1.00	39.3	26.3
10	HILL	1.50	200.00	4.45	12.40	1.00	37.5	23.4
2	HAMPTON 266A	1.00	192.25	3.58	20.13	1.00	38.7	24.3
13	WILLIAMS	1.00	199.75	3.98	17.95	1.00	40.6	24.3
1	JUPITER	1.25	194.75	4.87	13.26	1.00	38.3	24.8
6	BRAGG	1.00	193.00	2.88	16.52	1.00	37.8	25.3
7	DAVIS	1.00	187.00	3.38	18.11	1.00	39.4	23.2
12	BONUS	1.00	192.25	2.78	17.27	1.00	40.3	24.9
8	TRACY	1.00	191.75	1.90	18.29	1.00	43.4	20.4
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=-.05 +- - PROB=-.01)								
YIELD	KG/HA	0.23	0.32+	0.53++	-0.20	0.00		
DAYS TO FLOWER		0.23	-0.02	0.17	-0.16	0.00		
DAYS TO MATURITY		-0.07	-0.44++	-0.25	0.36++	0.00		
NODULE NUMBER 1		0.12	0.04	0.15	-0.23	0.00		
NODULE NUMBER 2		-0.15	0.15	0.10	-0.11	0.00		
NODULE WEIGHT 1		0.10	0.14	0.24	-0.19	0.00		
NODULE WEIGHT 2		-0.05	0.08	0.17	-0.02	0.00		
PLANT	HEIGHT	0.64++	0.35++	0.58++	-0.27+	0.00		
	LODGING	-0.09	0.16	-0.04	-0.17	0.00		
	SHATTER	1.00	0.32+	0.52++	-0.38++	0.00		
PLANTS	HARVEST	0.32+	1.00	0.48++	-0.56++	0.00		
PODS PER	PLANT	0.52++	0.48++	1.00	-0.54++	0.00		
100 SEED	WEIGHT	-0.38++	-0.56++	-0.54++	1.00	0.00		
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00		

TABLE 60

EXPERIMENT 95

YEAR 1974

REGION - ASIA
SITE - GANNORUWA
LATITUDE - 7 DEG. 15 MIN. N
DATE PLANTED - MAY 21, 1974
SOIL TYPE - CLAY LOAM
FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
AMOUNT OF MOISTURE - 743 MM
LOCAL VARIETIES - PB-1, S.J.2

COUNTRY - SRI LANKA
COOPERATOR - E. HERATH
ELEVATION - 457 M
DATE HARVESTED - AUGUST, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
3	HARDEE	3226.06	31.00	99.50	210.25	275.00	0.42	1.31	34.80	1.00
7	DAVIS	3018.69	28.00	95.50	152.00	239.50	0.34	1.10	31.13	1.25
2	HAMPTON 266A	3002.77	23.75	95.25	109.50	314.25	0.26	1.58	31.25	2.00
5	BOSSIER	2929.17	34.50	103.25	169.00	403.25	0.22	1.23	33.93	1.00
4	IMPROVED PELICAN	2918.92	32.50	102.75	144.25	387.00	0.24	1.44	62.05	2.25
15	S.J.2	2710.00	35.00	103.50	168.50	331.75	0.28	0.96	60.98	3.00
14	PB-1	2645.49	29.00	92.50	206.50	273.00	0.44	1.18	51.25	1.50
1	JUPITER	2614.40	39.50	119.00	186.00	467.00	0.57	2.26	70.52	2.50
9	FORREST	2509.29	25.50	94.75	118.25	266.25	0.22	1.80	31.03	1.00
10	HILL	2397.85	32.00	91.50	127.25	201.00	0.18	0.88	33.45	1.25
6	BRAGG	2208.61	24.75	93.75	78.50	327.25	0.24	1.32	33.63	1.00
13	WILLIAMS	2094.13	24.50	90.50	162.50	253.50	0.44	2.31	41.15	2.00
11	CLARK 63	1911.09	24.75	93.50	99.75	235.75	0.29	1.83	45.55	2.50
8	TRACY	1892.96	24.75	86.75	144.50	231.00	0.38	1.67	26.78	1.00
12	BONUS	1610.99	23.75	89.50	48.75	90.25	0.15	0.64	33.33	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=-.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.39++	0.43++	0.35++	0.34++	0.11	0.01	0.16	0.08
DAYS TO FLOWER	0.39++	1.00	0.83++	0.83++	0.49++	0.54++	0.22	-0.02	0.65++	0.34++
DAYS TO MATURITY	0.43++	0.83++	1.00	1.00	0.32+	0.64++	0.26+	0.20	0.71++	0.45++
NODULE NUMBER 1	0.35++	0.49++	0.32+	0.32+	1.00	0.42++	0.64++	0.13	0.30+	0.14
NODULE NUMBER 2	0.34++	0.54++	0.64++	0.64++	0.42++	1.00	0.29+	0.51++	0.46++	0.33++
NODULE WEIGHT 1	0.11	0.22	0.26+	0.26+	0.64++	0.29+	1.00	0.42++	0.31+	0.19
NODULE WEIGHT 2	0.01	-0.02	0.20	0.13	0.13	0.51++	0.42++	1.00	0.18	0.28+
PLANT HEIGHT	0.16	0.65++	0.71++	0.30+	0.30+	0.46++	0.31+	0.18	1.00	0.76++
LODGING	0.08	0.34++	0.45++	0.14	0.14	0.33++	0.19	0.28+	0.76++	1.00
SHATTER	-0.35++	-0.13	-0.10	-0.29+	-0.29+	-0.25	-0.19	-0.13	-0.02	0.10
PLANTS HARVEST	-0.25	0.07	-0.04	0.03	0.03	0.03	-0.08	-0.13	0.02	-0.07
PODS PER PLANT	0.51++	0.57++	0.53++	0.48++	0.48++	0.45++	0.17	-0.09	0.64++	0.41++
100 SEED WEIGHT	-0.05	-0.22	0.04	-0.27+	-0.27+	0.05	0.10	0.39++	-0.24	-0.05
QUALITY OF SEED	-0.50++	-0.35++	-0.22	-0.43++	-0.43++	-0.35++	0.05	0.12	-0.22	-0.10

TABLE 61 EXPERIMENT 14 YEAR 1974

REGION - ASIA
 SITE - GANNORUWA
 LATITUDE - 7 DEG. 15 MIN. N
 DATE PLANTED - MAY 24, 1974
 SOIL TYPE - CLAY LOAM
 FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
 AMOUNT OF MOISTURE - 853 MM
 NUMBER OF IRRIGATIONS - 12
 LOCAL VARIETIES - PB-1, S.J.2

COUNTRY - SRI LANKA
 COOPERATOR - E. HERATH
 ELEVATION - 457 M
 DATE HARVESTED - SEPTEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
9	FORREST	3206.02	24.50	98.25	163.25	287.50	0.51	1.85	33.93	1.50
15	S.J.2	3174.68	33.00	103.75	223.50	590.50	0.83	2.95	63.95	2.50
14	PB-1	3149.67	28.50	97.25	227.75	331.50	0.66	2.66	44.10	2.00
3	HARDEE	3144.88	31.00	105.50	238.00	372.00	1.00	2.59	35.23	1.00
10	HILL	3049.15	31.50	93.50	156.50	285.75	0.50	2.13	34.40	1.50
4	IMPROVED PELICAN	3000.52	31.75	102.75	180.50	380.75	0.64	2.50	77.43	3.00
7	DAVIS	2899.54	28.50	105.00	154.75	225.50	0.59	1.34	31.33	1.50
5	BOSSIER	2811.81	34.50	100.50	326.00	478.00	1.33	2.91	43.98	1.75
1	JUPITER	2715.67	39.50	129.50	273.25	604.50	1.45	2.45	66.73	3.25
2	HAMPTON 266A	2508.42	22.50	98.25	231.25	296.25	0.59	2.14	29.98	2.00
11	CLARK 63	2501.04	24.25	91.50	178.25	307.25	0.52	2.58	40.63	1.75
6	BRAGG	2481.45	24.00	96.50	210.75	320.00	0.58	1.78	33.55	1.00
12	BONUS	2277.04	21.25	91.00	101.00	243.50	0.40	1.66	39.30	1.00
13	WILLIAMS	2231.74	23.00	91.00	163.25	250.50	0.73	2.42	38.53	1.75
8	TRACY	1996.73	23.50	90.50	202.50	271.00	0.68	2.04	30.28	1.00
GRAND MEAN		2743.22	28.08	99.65	202.03	349.63	0.74	2.27	42.89	1.77
STANDARD ERROR OF A VARIETY MEAN		155.03	0.45	1.01	18.65	41.66	0.10	0.21	1.78	0.19
COEFFICIENT OF VARIATION		11.30%	3.21%	2.03%	18.47%	23.83%	26.51%	18.59%	8.32%	21.16%
5% LSD VARIETY MEANS (*****=NS)		442.47	1.29	2.89	53.24	118.89	0.28	0.60	5.09	0.53
C O R R E L A T I O N S										
					(+ - PROB=.05			+ - PROB=-.01)		
YIELD	KG/HA	1.00	0.45++	0.33++	0.21	0.28+	0.18	0.28+	0.30+	0.33+
DAYS TO FLOWER		0.45++	1.00	0.78++	0.51++	0.68++	0.65++	0.40++	0.63++	0.58++
DAYS TO MATURITY		0.33++	0.78++	1.00	0.43++	0.62++	0.61++	0.17	0.54++	0.60++
NODULE NUMBER 1		0.21	0.51++	0.43++	1.00	0.58++	0.70++	0.47++	0.23	0.26+
NODULE NUMBER 2		0.28+	0.68++	0.62++	0.58++	1.00	0.58++	0.62++	0.61++	0.55++
NODULE WEIGHT 1		0.18	0.65++	0.61++	0.70++	0.53++	1.00	0.51++	0.40++	0.38++
NODULE WEIGHT 2		0.28+	0.40++	0.17	0.47++	0.62++	0.51++	1.00	0.41++	0.41++
PLANT		0.30+	0.63++	0.54++	0.23	0.61++	0.40++	0.44++	1.00	0.78++
LODGING		0.33+	0.58++	0.60++	0.26+	0.55++	0.38++	0.41++	0.78++	1.00
SHATTER		-0.02	0.32+	0.44++	0.18	0.29+	0.25	0.06	0.20	0.38++
PLANTS HARVEST		-0.07	0.07	0.08	0.01	0.00	0.14	0.14	0.04	0.02
PODS PER PLANT		0.62++	0.52++	0.39++	0.14	0.46++	0.17	0.38++	0.56++	0.60++
100 SEED WEIGHT		-0.25	-0.06	0.23	0.07	-0.04	0.27+	-0.15	-0.22	-0.06
QUALITY OF SEED		-0.35++	0.06	0.38++	0.04	0.13	0.25	-0.06	0.16	0.25

TABLE 61 EXPERIMENT 14 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
9	FORREST	1.00	199.50	34.17	18.00	1.00	39.9	24.0
15	S.J.2	1.00	197.50	48.67	17.08	1.00	42.2	23.3
14	PB-1	1.00	202.75	42.60	14.43	1.00	43.7	20.8
3	HARDEE	1.00	205.50	32.72	20.25	1.25	40.2	24.9
10	HILL	1.00	200.00	30.08	19.00	1.00	39.5	23.9
4	IMPROVED PELICAN	1.00	203.00	48.05	16.65	1.25	44.1	24.2
7	DAVIS	1.00	202.50	29.83	21.53	1.75	40.1	24.8
5	BOSSIER	1.00	204.50	29.17	19.78	1.00	41.6	25.2
1	JUPITER	1.25	204.00	33.42	23.88	5.00	43.3	25.1
2	HAMPTON 266A	1.00	200.25	25.60	20.98	2.00	41.8	25.0
11	CLARK 63	1.00	204.50	25.67	20.10	3.50	44.5	21.6
6	BRAGG	1.00	199.00	20.72	21.95	2.00	40.1	25.2
12	BONUS	1.00	206.50	26.20	20.80	2.50	44.5	24.1
13	WILLIAMS	1.00	202.50	17.70	22.98	2.50	42.5	25.5
8	TRACY	1.00	198.00	19.90	21.50	2.25	46.5	20.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
YIELD KG/HA								
DAYS TO FLOWER								
DAYS TO MATURITY								
NODULE NUMBER 1								
NODULE NUMBER 2								
NODULE WEIGHT 1								
NODULE WEIGHT 2								
PLANT								
LODGING								
SHATTER								
PLANTS HARVEST								
PODS PER PLANT								
100 SEED WEIGHT								
QUALITY OF SEED								
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TABLE 62

EXPERIMENT 116

YEAR 1974

REGION - ASIA
 SITE - GANNORUWA
 LATITUDE - 7 DEG. 15 MIN. N
 DATE PLANTED - NOVEMBER 11, 1974
 SOIL TYPE - CLAY, PH 5.7
 FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
 AMOUNT OF MOISTURE - 300 MM
 NUMBER OF IRRIGATIONS - 10
 LOCAL VARIETIES - PB-1, S.J.2

COUNTRY - SRI LANKA
 COOPERATOR - B.N. EMERSON
 ELEVATION - 457 M
 DATE HARVESTED - FEBRUARY, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
15	S.J.2	2396.19	33.00	96.00	240.25	267.75	0.58	1.45	66.40	1.50
13	WILLIAMS	2090.21	26.00	88.00	249.00	223.50	0.57	1.84	38.63	1.00
1	JUPITER	2008.82	34.25	102.00	202.00	287.00	0.75	1.87	73.82	1.25
7	DAVIS	1967.27	28.00	98.00	223.00	273.75	0.60	1.98	30.65	1.00
4	IMPROVED PELICAN	1936.26	33.75	89.25	215.25	255.25	0.76	1.23	54.70	1.25
2	HAMPTON 266A	1910.80	26.00	90.50	241.75	310.25	0.59	2.02	30.40	1.00
3	HARDEE	1886.34	30.25	97.50	296.50	346.75	0.88	2.27	38.33	1.00
10	HILL	1852.87	28.50	88.00	253.25	287.75	0.71	1.60	44.95	1.00
5	BOSSIER	1816.03	32.00	95.00	348.25	382.50	0.97	2.08	45.78	1.00
12	BONUS	1813.36	26.00	89.00	216.25	218.25	0.39	1.41	36.58	1.00
9	FORREST	1591.28	26.50	91.75	202.00	317.75	0.57	1.68	37.63	1.00
14	PB-1	1521.89	30.25	84.00	234.00	350.75	0.54	1.99	42.10	1.25
11	CLARK 63	1413.99	26.50	88.50	188.50	200.50	0.49	1.74	36.65	1.00
6	BRAGG	1372.82	26.00	92.00	215.75	285.75	0.54	1.71	36.08	1.25
8	TRACY	1113.35	26.00	80.25	269.00	291.50	0.50	1.92	31.53	1.00
GRAND MEAN		1779.43	28.87	91.32	239.65	286.60	0.63	1.79	42.95	1.10
STANDARD ERROR OF A VARIETY MEAN		186.39	0.52	0.72	25.60	32.01	0.10	0.28	2.08	0.15
* COEFFICIENT OF VARIATION		20.95%	3.64%	1.58%	21.37%	22.33%	31.86%	31.75%	9.68%	26.86%
5% LSD VARIETY MEANS (*****=NS)		531.96	1.50	2.05	73.08	91.34	0.29	*****	5.93	*****

C O R R E L A T I O N S										
YIELD	KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING	
DAYS TO FLOWER	1.00	0.33++	0.45++	0.18	0.13	0.46++	0.40++	0.51++	0.01	
DAYS TO MATURITY	0.33++	1.00	0.47++	0.09	0.12	0.36++	-0.05	0.78++	0.31+	
NODULE NUMBER 1	0.18	0.09	1.00	0.03	0.14	0.33++	0.09	0.45++	0.14	
NODULE NUMBER 2	0.13	0.12	0.03	1.00	0.48++	0.67++	0.45++	-0.02	0.03	
NODULE WEIGHT 1	0.46++	0.36++	0.14	0.48++	1.00	0.55++	0.58++	0.02	-0.03	
NODULE WEIGHT 2	0.40++	-0.05	0.33++	0.67++	0.55++	1.00	0.63++	0.33+	0.04	
PLANT HEIGHT	0.51++	0.78++	0.45++	0.45++	0.58++	0.63++	1.00	0.02	-0.17	
LODGING	0.01	0.31+	0.14	-0.02	0.02	0.33+	0.02	1.00	0.29+	
SHATTER	0.31+	0.30+	-0.05	0.03	-0.03	0.04	-0.17	0.29+	1.00	
PLANTS HARVEST	0.40++	0.15	0.08	-0.21	-0.06	0.08	-0.02	0.24	-0.08	
PODS PER PLANT	0.47++	0.67++	0.29	0.21	0.13	0.26+	0.24	0.32+	-0.00	
100 SEED WEIGHT	0.28+	-0.39++	0.19	0.13	-0.11	0.35++	0.08	0.53++	0.35++	
QUALITY OF SEED	0.00	0.00	0.00	0.01	0.00	0.05	0.24	-0.11	-0.25	
				0.00	0.00	0.00	0.00	0.00	0.00	

(+ - PROB=.05 ++ - PROB=.01)

TABLE 62 EXPERIMENT 116 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
15	S.J.2	1.00	201.00	30.00	17.32	1.00	44.6	21.0
13	WILLIAMS	1.00	200.00	16.50	19.49	1.00	41.9	23.8
1	JUPITER	1.00	200.50	21.50	18.51	1.00	36.8	26.7
7	DAVIS	1.00	198.75	19.75	18.61	1.00	38.6	24.2
4	IMPROVED PELICAN	1.50	200.00	27.75	15.24	1.00	42.4	23.4
2	HAMPTON 266A	1.00	200.50	18.25	20.62	1.00	41.4	22.7
3	HARDEE	1.00	200.50	26.50	17.50	1.00	39.8	24.3
10	HILL	1.25	199.50	20.75	17.05	1.00	40.1	23.3
5	BOSSIER	1.00	200.50	19.75	17.84	1.00	39.1	24.6
12	BONUS	1.00	200.00	15.75	19.41	1.00	41.9	24.0
9	FORREST	1.00	200.00	17.75	16.82	1.00	38.3	24.1
14	PB-1	1.00	200.00	28.75	12.05	1.00	41.1	21.2
11	CLARK 63	1.00	200.00	15.00	18.86	1.00	39.8	24.2
6	BRAGG	1.00	199.25	15.75	19.92	1.00	40.2	23.3
8	TRACY	1.00	199.75	13.00	18.60	1.00	37.2	23.7
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.05	200.02	20.45	17.86	1.00	40.2	23.6
COEFFICIENT OF VARIATION		0.10	0.63	1.55	0.82	0.00		
5% LSD VARIETY MEANS (*****=NS)		18.39%	0.63%	15.13%	9.19%	0.00%		
		0.28	*****	4.41	2.34	0.00		
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)								
YIELD	KG/HA	0.31+	0.40++	0.47++	0.28+	0.00		
DAYS TO FLOWER		0.30+	0.15	0.67++	-0.39++	0.00		
DAYS TO MATURITY		-0.05	0.08	0.29+	0.19	0.00		
NODULE NUMBER 1		-0.21	0.21	0.13	0.01	0.00		
NODULE NUMBER 2		-0.06	0.13	0.18	-0.11	0.00		
NODULE WEIGHT 1		0.08	0.26+	0.35++	0.05	0.00		
NODULE WEIGHT 2		-0.02	0.24	0.08	0.24	0.00		
PLANT	HEIGHT	0.24	0.32+	0.53++	-0.11	0.00		
LODGING		-0.08	-0.00	0.35++	-0.25	0.00		
SHATTER		1.00	-0.00	0.33++	-0.07	0.00		
HARVEST		-0.00	1.00	0.19	0.15	0.00		
PLANTS		0.33++	0.19	1.00	-0.41++	0.00		
PODS PER PLANT		-0.07	0.15	-0.41++	1.00	0.00		
100 SEED WEIGHT		0.00	0.00	0.00	0.00	1.00		
QUALITY OF SEED								

TABLE 63 EXPERIMENT 123 (CONTINUED)

ENTY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
7	DAVIS	1.00	197.25	22.75	18.85	1.00	39.0	25.8
3	HARDEE	1.00	198.25	24.25	18.13	1.00	40.0	26.1
5	BOSSIER	1.00	193.75	19.75	18.92	1.00	38.0	28.1
4	IMPROVED PELICAN	1.00	197.50	28.75	14.67	1.00	40.8	25.7
1	JUPIER	1.00	196.25	32.75	20.96	1.00	39.2	27.0
15	S.J.2	1.00	193.75	27.25	13.86	1.00	38.7	24.1
2	HAMPTON 266A	1.00	199.50	21.00	22.84	1.00	37.8	27.3
6	BRAGG	1.00	196.50	22.25	20.27	1.00	41.8	25.1
11	CLARK 63	1.00	199.50	19.50	19.01	1.00	38.7	26.5
14	PB-1	1.00	196.50	30.25	13.29	1.00	38.9	24.3
9	FORREST	1.00	199.50	23.25	15.74	1.00	37.1	26.9
13	WILLIAMS	1.00	195.50	19.50	19.38	1.00	38.9	26.7
12	BONUS	1.00	199.50	22.50	19.08	1.00	39.7	26.2
10	HILL	1.00	198.00	20.75	16.12	1.00	34.5	26.4
8	TRACY	1.00	198.50	17.75	20.08	1.00	39.7	24.5
	GRAND MEAN	1.00	197.32	23.48	18.08	1.00	38.9	26.0
	STANDARD ERROR OF A VARIETY MEAN	0.00	1.96	1.15	0.44	0.00		
	COEFFICIENT OF VARIATION	0.00%	1.98%	9.76%	4.92%	0.00%		
	5% ISD VARIETY MEANS (*****=NS)	0.00	*****	3.27	1.27	0.00		
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)								
YIELD	KG/HA	0.00	-0.15	0.34++	0.06	0.00		
DAYS TO FLOWER		0.00	-0.21	0.67++	-0.50++	0.00		
DAYS TO MATURITY		0.00	-0.12	0.52++	0.23	0.00		
NODULE NUMBER 1		0.00	-0.25+	-0.20	-0.07	0.00		
NODULE NUMBER 2		0.00	-0.35++	0.32+	-0.28+	0.00		
NODULE WEIGHT 1		0.00	-0.10	0.12	-0.34++	0.00		
NODULE WEIGHT 2		0.00	-0.28+	0.44++	-0.43++	0.00		
PLANT	HEIGHT	0.00	-0.22	0.65++	-0.39++	0.00		
	LODGING	0.00	0.00	0.00	0.00	0.00		
	SHATTER	1.00	0.00	0.00	0.00	0.00		
PLANTS	HARVEST	0.00	1.00	-0.07	0.14	0.00		
PODS PER	PLANT	0.00	-0.07	1.00	-0.33++	0.00		
100 SEED	WEIGHT	0.00	0.14	-0.33++	1.00	0.00		
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00		

TABLE 64 EXPERIMENT 13 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
14	PB-1	1.00	193.75	34.25	14.76	1.25	44.2	20.9
2	HAMPTON 266A	1.00	160.25	31.25	22.32	1.00	40.2	26.8
6	BRAGG	1.00	185.75	30.50	19.60	1.25	43.4	25.7
7	DAVIS	1.00	178.25	29.75	20.17	1.25	44.5	23.3
9	FORREST	1.00	179.00	31.00	17.37	1.00	42.2	24.6
1	JUPITER	1.00	188.50	33.75	18.95	1.25	44.6	24.2
4	IMPROVED PELICAN	1.00	190.00	38.00	15.66	1.00	44.7	23.5
5	BOSSIER	1.00	183.25	26.00	19.11	1.25	46.4	22.5
8	TRACY	1.00	174.50	24.75	19.99	1.00	42.4	23.3
11	CLARK 63	1.00	191.00	22.75	18.82	1.00	40.7	24.1
12	BONUS	1.00	195.25	18.75	20.93	1.25	43.2	24.3
13	WILLIAMS	1.00	192.25	19.75	20.96	1.75	41.6	25.8
15	S.J-2	1.00	186.50	36.75	16.08	1.00	43.9	22.0
3	HARDEE	1.00	78.00	48.50	19.40	1.25	44.6	24.3
10	HILL	1.00	121.00	25.00	18.40	1.00	40.4	22.3
	GRAND MEAN	1.00	173.15	30.05	18.83	1.17	43.1	23.8
	STANDARD ERROR OF A VARIETY MEAN	0.00	5.28	2.39	0.48	0.18		
	COEFFICIENT OF VARIATION	0.00%	6.10%	15.93%	5.05%	31.48%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	15.06	6.83	1.36	*****		
C O R R E L A T I O N S								
			(+ - PROB=.05		++ - PROB=.01)			
	YIELD							
	DAYS TO FLOWER	0.00	0.28+	0.04	0.00	-0.05		
	DAYS TO MATURITY	0.00	-0.12	0.59++	-0.43++	-0.12		
	NODULE NUMBER 1	0.00	-0.15	0.46++	-0.13	0.04		
	NODULE NUMBER 2	0.00	0.23	-0.30+	0.15	0.02		
	NODULE WEIGHT 1	0.00	-0.04	-0.16	0.09	0.09		
	NODULE WEIGHT 2	0.00	0.06	-0.06	-0.00	-0.09		
	PLANT	0.00	-0.17	-0.14	0.28+	-0.08		
	HEIGHT	0.00	0.54++	0.15	-0.56++	-0.09		
	LODGING	0.00	0.26+	0.39++	-0.50++	-0.13		
	SHATTER	0.00	0.00	0.00	0.00	0.00		
	HARVEST	1.00	0.00	0.00	-0.16	0.06		
	PLANTS	0.00	-0.44++	1.00	-0.32+	-0.15		
	PODS PER	0.00	-0.16	-0.32+	1.00	0.14		
	100 SEED	0.00	0.06	-0.15	0.14	1.00		
	QUALITY OF SEED	0.00						

TABLE 65 EXPERIMENT 124

YEAR 1974

REGION - ASIA
 SITE - MAHA ILLUPPALLANA
 LATITUDE - 8 DEG. 5 MIN. N
 DATE PLANTED - NOVEMBER 9, 1974
 SOIL TYPE - SANDY CLAY LOAM, PH 6.4
 FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
 AMOUNT OF MOISTURE - 256 MM
 NUMBER OF IRRIGATIONS - 3
 LOCAL VARIETIES - PB-1, S.J.2

COUNTRY - SRI LANKA
 COOPERATOR - A.O.C. DE ZOYSA
 ELEVATION - 138 M
 DATE HARVESTED - FEBRUARY, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
3	HARDEE	2225.44	26.00	86.00	96.25	295.00	0.48	3.40	31.75	1.00
7	DAVIS	2183.77	26.00	81.00	93.00	210.75	0.23	1.93	28.50	1.00
5	BOSSIER	2019.15	25.00	80.25	167.00	301.50	0.57	2.03	39.75	1.00
14	PB-1	1831.62	28.00	70.00	48.75	211.00	0.08	2.08	49.25	1.00
6	BRAGG	1694.09	22.00	75.75	24.00	114.25	0.05	0.70	33.25	1.00
13	WILLIAMS	1669.08	22.00	75.00	122.50	190.00	0.20	1.20	40.00	1.00
10	HILL	1619.07	26.00	72.50	109.00	162.00	0.19	1.65	39.25	1.00
1	JUPITER	1604.49	39.00	90.00	61.75	118.75	0.18	0.92	62.25	1.00
15	S.J.2	1602.40	31.00	78.00	97.25	155.50	0.25	1.10	58.50	1.00
9	FORREST	1587.82	23.00	76.00	73.75	164.75	0.14	0.92	37.75	1.00
11	CLARK 63	1566.98	21.00	75.00	36.25	114.00	0.06	0.72	42.25	1.00
4	IMPROVED PELICAN	1554.48	31.00	76.25	99.25	144.75	0.17	1.43	59.25	1.00
2	HAMPTON 266A	1498.22	26.00	78.00	61.75	145.75	0.21	1.73	28.00	1.00
12	BONUS	1387.78	21.00	71.25	49.50	88.25	0.07	0.65	35.50	1.00
8	TRACY	1237.75	21.00	70.00	74.25	191.75	0.15	1.35	30.00	1.00
	GRAND MEAN	1685.48	25.87	77.00	80.95	173.87	0.20	1.45	41.02	1.00
	STANDARD ERROR OF A VARIETY MEAN	141.27	0.00	0.73	24.57	31.30	0.07	0.27	1.25	0.00
	COEFFICIENT OF VARIATION	16.76%	0.00%	1.89%	60.72%	36.01%	68.41%	37.74%	6.11%	0.00%
	5% LSD VARIETY MEANS (*****=NS)	403.20	0.00	2.08	70.14	89.34	0.20	0.78	3.57	0.00
C O R R E L A T I O N S										
(+ - PROB=-.05 +- - PROB=-.01)										
YIELD	KG/HA	1.00	0.09	0.39++	0.10	0.53++	0.30+	0.54++	-0.11	0.00
DAYS TO FLOWER	0.09	1.00	0.61++	0.07	-0.03	-0.03	0.12	0.09	0.75++	0.00
DAYS TO MATURITY	0.39++	0.61++	1.00	0.13	0.17	0.35++	0.25	0.23	0.23	0.00
NODULE NUMBER 1	0.10	0.07	0.13	1.00	0.43++	0.66++	0.31+	0.31+	0.04	0.00
NODULE NUMBER 2	0.53++	-0.03	0.17	0.43++	1.00	0.59++	0.81++	0.81++	-0.16	0.00
NODULE WEIGHT 1	0.30+	0.12	0.35++	0.25	0.56++	0.59++	1.00	0.56++	-0.08	0.00
NODULE WEIGHT 2	0.54++	0.09	0.25	0.31+	0.81++	0.56++	1.00	0.56++	-0.20	0.00
PLANT HEIGHT	-0.11	0.75++	0.23	0.04	-0.16	-0.08	-0.08	-0.20	1.00	0.00
LODGING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	-0.09	0.06	0.04	0.11	-0.05	-0.03	-0.03	-0.09	0.06	0.00
PLANT	0.05	0.37++	0.01	0.04	-0.05	-0.07	0.12	0.12	0.26+	0.00
PODS PER 100 SEED	0.08	-0.30+	0.29+	-0.00	0.02	0.10	-0.07	-0.07	-0.53++	0.00
QUALITY OF SEED	0.11	0.12	-0.33++	-0.16	0.11	-0.18	0.19	0.19	0.20	0.00

TABLE 65 EXPERIMENT 124 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
3	HARDEE	1.00	188.25	23.48	17.53	1.00	39.9	26.1
7	DAVIS	1.00	187.25	23.25	19.36	1.00	40.1	24.7
5	BOSSIER	1.00	187.25	20.93	18.14	1.00	40.5	25.9
14	PB-1	1.00	187.75	30.55	12.66	2.00	43.7	20.8
6	BRAGG	1.00	187.25	21.35	19.03	1.00	40.0	24.8
13	WILLIAMS	1.00	190.50	18.75	20.96	1.00	39.8	26.0
10	HILL	1.00	184.00	20.70	15.32	1.00	40.5	24.6
1	JUPITER	1.00	190.50	23.38	19.02	1.00	37.7	27.9
15	S.J.2	1.00	188.75	26.83	13.90	1.00	41.3	24.3
9	FORREST	1.00	189.75	22.85	15.62	1.00	38.0	26.2
11	CLARK 63	1.00	185.25	17.05	17.65	1.00	38.8	26.3
4	IMPROVED PELICAN	1.00	189.50	24.65	12.99	1.00	40.8	25.6
2	HAMPTON 266A	1.00	189.75	23.22	19.67	1.00	38.6	25.7
12	BONUS	1.00	194.75	20.95	18.38	1.00	41.1	25.1
8	TRACY	1.00	187.75	21.80	17.93	1.00	39.5	24.7
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	188.55	22.65	17.21	1.07	40.0	25.2
COEFFICIENT OF VARIATION		0.00	1.46	1.77	0.24	0.00		
5% LSD VARIETY MEANS (*****=NS)		0.00%	1.55%	15.66%	2.79%	0.00%		
		0.00	4.16	5.06	0.69	0.00		
C O R R E L A T I O N S								
				(+ - PROB=.05		++ - PROB=.01)		
YIELD	KG/HA	0.00	-0.09	0.05	0.08	0.11		
DAYS TO FLOWER		0.00	0.06	0.37++	-0.30+	0.12		
DAYS TO MATURITY		0.00	0.04	0.01	0.29+	-0.33++		
NODULE NUMBER 1		0.00	0.11	0.04	-0.00	-0.16		
NODULE NUMBER 2		0.00	-0.05	-0.05	0.02	0.11		
NODULE WEIGHT 1		0.00	-0.03	-0.07	0.10	-0.18		
NODULE WEIGHT 2		0.00	-0.09	0.12	-0.07	0.19		
PLANT	HEIGHT	0.00	0.06	0.26+	-0.53++	0.20		
LODGING		0.00	0.00	0.00	0.00	0.00		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS	HARVEST	0.00	1.00	-0.02	0.16	-0.06		
PODS PER PLANT		0.00	-0.02	1.00	-0.47++	0.47++		
100 SEED WEIGHT		0.00	0.16	-0.47++	1.00	-0.49++		
QUALITY OF SEED		0.00	-0.06	0.47++	-0.49++	1.00		

TABLE 66	EXPERIMENT 93	YEAR 1974
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REGION - ASIA
SITE - MASKELIYA
LATITUDE - 7 DEG. N
DATE PLANTED - MAY 23, 1974
SOIL TYPE - GRAVELLY CLAY, PH 5.1
FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
AMOUNT OF MOISTURE - 3486 MM
LOCAL VARIETIES - PB-1, S.J.2

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPIER	991.86	66.00	149.00	63.25	61.25	0.35	0.52	42.25	1.00
14	PB-1	879.34	67.00	131.00	73.75	59.50	0.57	0.44	28.25	1.00
4	IMPROVED PELICAN	860.59	66.75	148.00	54.75	55.00	0.40	0.44	24.75	1.00
5	BOSSIER	816.83	52.00	104.25	70.75	78.50	0.74	0.74	18.00	1.00
3	HARDEE	795.99	58.50	131.00	73.25	63.50	0.53	0.54	17.00	1.00
15	S.J.-2	789.74	66.75	129.50	45.50	40.25	0.41	0.38	21.75	1.00
11	CLARK 63	745.98	42.75	104.25	46.25	48.25	0.56	0.50	22.25	1.00
9	FORREST	702.22	55.00	102.75	54.50	43.00	0.43	0.30	21.00	1.00
10	HILL	702.22	58.25	107.75	49.00	32.00	0.34	0.25	19.50	1.00
2	HAMPTON 266A	698.06	50.50	101.50	106.75	63.25	0.85	0.30	18.25	1.00
7	DAVIS	683.47	59.25	130.00	77.75	50.50	0.46	0.50	14.25	1.00
13	WILLIAMS	554.28	50.75	106.75	82.75	23.00	0.30	0.05	11.00	1.00
6	BAGG	487.60	53.00	106.00	97.50	59.00	0.34	0.30	18.25	1.00
8	TRACY	408.41	45.50	104.75	45.75	21.75	0.32	0.13	11.25	1.00
12	BONUS	383.41	44.00	105.25	85.50	10.25	0.46	0.06	11.50	1.00
	GRAND MEAN	700.00	55.73	117.42	68.47	47.27	0.47	0.36	19.68	1.00
	STANDARD ERROR OF A VARIETY MEAN	76.33	2.23	0.31	15.85	10.25	0.14	0.10	1.43	0.00
	COEFFICIENT OF VARIATION	21.81%	7.99%	0.53%	46.31%	43.35%	60.56%	57.50%	14.49%	0.00%
	5% LSD VARIETY MEANS (*****=NS)	217.84	6.35	0.90	*****	29.24	*****	0.30	4.07	0.00
C O R R E L A T I O N S										
	(+ - PROB=.05 +- - PROB=.01)									
YIELD	KG/HA	1.00	0.48++	0.54++	-0.01	0.57++	0.35++	0.64++	0.73++	0.00
DAYS TO FLOWER		0.48++	1.00	0.75++	-0.11	0.19	-0.06	0.19	0.50++	0.00
DAYS TO MATURITY		0.54++	0.75++	1.00	-0.08	0.23	-0.10	0.31+	0.60++	0.00
NODULE NUMBER 1		-0.01	-0.11	-0.08	1.00	0.24	0.29+	-0.02	-0.04	0.00
NODULE NUMBER 2		0.57++	0.19	0.23	0.24	1.00	0.54++	0.83++	0.45++	0.00
NODULE WEIGHT 1		0.35++	-0.06	-0.10	0.29+	0.54++	1.00	0.43++	0.16	0.00
NODULE WEIGHT 2		0.64++	0.19	0.31+	-0.02	0.83++	0.43++	1.00	0.44++	0.00
PLANT HEIGHT		0.73++	0.50++	0.60++	-0.04	0.45++	0.16	0.44++	1.00	0.00
LODGING		0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST		0.37++	0.48++	0.56++	0.06	0.11	-0.21	0.14	0.49++	0.00
PODS PER PLANT		0.73++	0.49++	0.67++	-0.00	0.48++	0.22	0.52++	0.83++	0.00
100 SEED WEIGHT		-0.27+	-0.50++	-0.54++	0.23	0.06	0.12	-0.10	-0.30+	0.00
QUALITY OF SEED		-0.03	-0.18	-0.24	0.10	0.25	0.18	0.23	-0.35++	0.00

TABLE 66 EXPERIMENT 93 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.00	241.50	12.72	18.30	2.00	40.8	25.9
14	PB-1	1.00	218.25	9.78	16.00	3.25	45.9	19.6
4	IMPROVED PELICAN	1.00	214.75	11.38	15.58	2.00	45.0	23.0
5	BOSSIER	1.00	147.00	6.55	18.90	4.00	44.8	23.0
3	HARDEE	1.00	201.75	7.02	19.10	4.00	43.0	24.3
15	S-J.2	1.00	221.75	6.80	15.80	2.00	44.0	21.7
11	CLARK 63	1.00	180.75	7.90	17.83	3.00	42.4	23.7
9	FORREST	1.00	199.50	5.48	17.73	2.00	42.1	23.0
10	HILL	1.00	186.75	7.72	18.83	3.00	42.2	23.1
2	HAMPTON 266A	1.00	114.00	7.22	20.53	3.00	42.6	23.8
7	DAVIS	1.00	178.50	5.80	18.40	3.25	42.4	23.6
13	WILLIAMS	1.00	150.00	3.30	19.58	3.00	43.6	24.0
6	BRAGG	1.00	202.50	4.35	19.65	3.25	44.4	23.3
8	TRACY	1.00	142.00	3.40	18.90	3.00	44.3	21.8
12	BONUS	1.00	178.50	4.30	17.73	2.00	44.8	22.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	185.17	6.92	18.19	2.85	43.5	23.1
COEFFICIENT OF VARIATION		0.00	14.41	0.73	0.25	0.16		
5% LSD VARIETY MEANS (*****=NS)		0.00	15.56%	21.11%	2.74%	10.92%		
		0.00	41.12	2.09	0.71	0.44		
C O R R E L A T I O N S								
		(+ - PROB=.05		+ - PROB=.01)				
YIELD	KG/HA	0.00	0.37++	0.73++	-0.27+	-0.03		
DAYS TO FLOWER		0.00	0.48++	0.49++	-0.50++	-0.18		
DAYS TO MATURITY		0.00	0.56++	0.67++	-0.54++	-0.24		
NODULE NUMBER 1		0.00	0.06	-0.00	0.23	0.10		
NODULE NUMBER 2		0.00	0.11	0.48++	0.06	0.25		
NODULE HEIGHT 1		0.00	-0.21	0.22	0.12	0.18		
NODULE HEIGHT 2		0.00	0.14	0.52++	-0.10	0.23		
PLANT HEIGHT		0.00	0.49++	0.83++	-0.30+	-0.35++		
LODGING		0.00	0.00	0.00	0.00	0.00		
SHATTER		0.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		1.00	1.00	0.41++	-0.48++	-0.27+		
PODS PER PLANT		0.00	0.41++	1.00	-0.40++	-0.21		
100 SEED WEIGHT		0.00	-0.48++	-0.40++	1.00	0.46++		
QUALITY OF SEED		0.00	-0.27+	-0.21	0.46++	1.00		

TABLE 67

EXPERIMENT 119

YEAR 1974

REGION - ASIA
 SITE - PUTTALAM
 LATITUDE - 8 DEG. 12 MIN. N
 DATE PLANTED - DECEMBER 1, 1974
 SOIL TYPE - SAND 89%, SILT 1%, CLAY 10%, PH 7.5
 FERTILIZER USED (KG/HA) - N 20.0, P 35.0, K 66.0
 AMOUNT OF MOISTURE - 325 MM
 NUMBER OF IRRIGATIONS - 10
 LOCAL VARIETIES - PB-1, S.J.2

COUNTRY - SRI LANKA
 COOPERATOR - I. PRADNASIRI, S. THIRIANATHAN
 ELEVATION - 24 M
 DATE HARVESTED - MARCH, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE HEIGHT	PLANT HEIGHT	LODGING
7	DAVIS	2275.45	28.50	88.50	151.75	134.75	0.35	0.69	24.00	1.00	
9	FORREST	2037.91	30.00	79.50	156.00	121.25	0.32	0.56	27.50	1.00	
13	WILLIAMS	1908.71	30.25	80.50	250.50	155.25	0.40	0.90	28.25	1.00	
11	CLARK 63	1867.04	28.25	84.00	159.00	118.25	0.35	0.54	26.75	1.00	
1	JUPIER	1825.36	35.00	89.25	131.75	130.50	0.21	0.66	46.13	1.00	
4	IMPROVED PELICAN	1742.01	35.25	79.00	111.75	133.50	0.43	0.69	36.25	1.00	
3	HARDEE	1658.66	29.25	89.50	172.50	152.75	0.44	0.60	24.00	1.00	
14	PB-1	1650.33	28.00	76.75	165.75	168.25	0.35	0.78	31.50	1.00	
15	BOSSIER	1579.48	31.25	83.75	221.75	178.75	0.38	0.68	29.50	1.00	
5	S.J.2	1512.80	35.25	90.50	108.25	135.00	0.28	0.80	40.00	1.00	
2	HAMPTON 266A	1479.46	28.75	90.00	227.75	189.50	0.31	0.45	31.50	1.00	
10	HILL	1412.78	29.25	80.50	184.50	157.50	0.31	0.62	27.75	1.00	
6	BROGG	1321.10	29.00	89.50	173.00	147.25	0.29	0.64	28.00	1.00	
12	BONUS	954.36	29.00	89.25	160.50	140.75	0.37	0.63	22.75	1.00	
8	TRACY	904.35	28.50	76.25	169.75	157.50	0.34	0.64	19.25	1.00	
GRAND MEAN											
STANDARD ERROR OF A VARIETY MEAN											
COEFFICIENT OF VARIATION											
5% LSD VARIETY MEANS (*****=NS)											
C O R R E L A T I O N S											
YIELD KG/HA											
DAYS TO FLOWER											
DAYS TO MATURITY											
NODULE NUMBER 1											
NODULE NUMBER 2											
NODULE WEIGHT 1											
NODULE WEIGHT 2											
PLANT											
HEIGHT											
LODGING											
SHATTER											
HARVEST											
PLANTS											
PODS PER PLANT											
100 SEED WEIGHT											
QUALITY OF SEED											
YIELD											
DAYS TO FLOWER											
DAYS TO MATURITY											
NODULE NUMBER 1											
NODULE NUMBER 2											
NODULE WEIGHT 1											
NODULE WEIGHT 2											
PLANT											
HEIGHT											
LODGING											
SHATTER											
HARVEST											
PLANTS											
PODS PER PLANT											
100 SEED WEIGHT											
QUALITY OF SEED											

(* - PROB=.05 ** - PROB=.01)

TABLE 67 EXPERIMENT 119 YEAR 1974 (CONTINUED)

ENTFY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
7	DAVIS	1.00	209.25	14.30	20.59	2.75	40.9	24.6
9	FORREST	1.00	227.00	15.50	16.75	4.00	39.7	24.6
13	WILLIAMS	4.00	228.25	12.05	23.33	2.25	42.3	23.9
11	CIARK 63	1.00	226.25	10.18	20.79	3.75	43.8	24.1
1	JUPITER	1.00	222.75	15.05	16.86	3.25	41.9	25.5
4	IMPROVED PELICAN	2.50	226.25	19.43	17.23	2.75	43.5	24.3
3	HARDEE	1.00	216.50	11.20	19.26	1.75	41.9	25.4
14	PB-1	4.00	228.25	20.03	14.15	1.00	43.2	21.3
5	BOSSIER	1.25	210.25	13.13	18.93	2.75	42.1	24.9
15	S.J.2	1.00	227.75	15.80	16.44	1.00	44.1	23.4
2	HAMPTON 266A	1.00	227.50	11.05	23.29	1.50	40.1	25.4
10	HILL	1.00	219.50	11.68	17.74	1.50	39.4	24.1
6	BAGG	1.00	215.75	10.03	19.26	3.75	42.3	22.9
12	BONUS	1.00	222.25	10.25	22.87	3.25	44.0	24.2
8	TRACY	1.00	232.50	7.32	21.00	2.50	42.1	22.6
	GRAND MEAN	1.52	222.67	13.13	19.23	2.52	42.1	24.1
	STANDARD ERROR OF A VARIETY MEAN	0.33	5.37	1.62	0.49	0.25		
	COEFFICIENT OF VARIATION	43.60%	4.82%	24.62%	5.12%	19.99%		
	5% ISD VARIETY MEANS (*****=NS)	0.94	*****	4.61	1.40	0.72		
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)								
	YIELD KG/HA	0.29+	-0.23	0.60++	-0.15	0.05		
	DAYS TO FLOWER	-0.00	-0.05	0.33++	-0.31+	-0.06		
	DAYS TO MATURITY	-0.46++	-0.32+	-0.23	0.23	0.02		
	NODULE NUMBER 1	0.16	-0.09	-0.28+	0.46++	-0.06		
	NODULE NUMBER 2	0.22	-0.11	-0.05	0.20	-0.30+		
	NODULE WEIGHT 1	0.10	0.12	-0.06	0.04	-0.04		
	NODULE WEIGHT 2	0.37++	-0.04	0.34++	-0.08	-0.14		
	PLANT HEIGHT	0.08	-0.00	0.36++	-0.42++	-0.10		
	LODGING	0.00	0.00	0.00	0.00	0.00		
	SHATTER	1.00	0.10	0.49++	-0.10	-0.31+		
	HARVEST	0.10	1.00	-0.11	0.02	-0.07		
	PLANTS	0.49++	-0.11	1.00	-0.55++	-0.25		
	PODS PER PLANT	-0.10	0.02	1.00	1.00	-0.19		
	100 SEED WEIGHT	-0.31+	-0.07	-0.25	0.19	1.00		
	QUALITY OF SEED							

TABLE 68	EXPERIMENT 139	YEAR 1974
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REGION - ASIA
SITE - PUTTALAM
LATITUDE - 8 DEG. 12 MIN. N
DATE PLANTED - DECEMBER 2, 1974
SOIL TYPE - SAND 84%, SILT 2.5%, CLAY 13.5%, PH 7.6
FERTILIZER USED (KG/HA) - P 35.0, K 66.0
AMOUNT OF MOISTURE - 325 MM
NUMBER OF IRRIGATIONS - 10
LOCAL VARIETIES - PB-1, S.J.2

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
15	S.J.2	2200.44	30.00	86.25	109.00	140.50	0.68	2.08	42.50	1.00
3	HARDEE	1987.90	33.00	87.75	124.00	160.00	0.62	2.02	25.25	1.00
5	BOSSIER	1846.20	32.50	82.25	159.25	182.25	0.61	1.18	32.75	1.00
13	WILLIAMS	1746.18	26.75	74.25	241.25	198.00	0.73	0.83	24.38	1.00
2	HAMPTON 266A	1646.16	26.75	80.25	225.75	217.25	0.51	1.15	24.63	1.00
7	DAVIS	1554.48	27.25	87.50	134.50	158.25	0.50	1.18	25.25	1.00
4	IMPROVED PELICAN	1512.80	34.75	80.25	118.00	153.75	0.53	1.99	34.50	1.00
8	TRACY	1471.13	26.00	76.75	247.00	239.25	0.56	1.08	23.35	1.00
9	FORREST	1454.46	26.75	86.75	136.50	148.00	0.53	1.06	28.13	1.00
6	BRAGG	1412.78	26.75	80.75	180.25	181.25	0.46	0.94	26.75	1.00
14	PB-1	1387.78	26.00	74.25	162.50	148.75	0.55	0.88	32.88	2.75
10	HILL	1358.60	27.00	78.75	191.50	187.75	0.72	1.09	28.00	1.00
11	CLARK 63	1262.75	27.50	78.75	190.75	192.00	0.56	0.91	25.63	2.50
1	JUPITER	1246.08	39.50	87.25	133.00	144.25	0.38	1.58	45.00	1.00
12	BONUS	987.70	27.25	87.50	138.75	128.75	0.67	0.81	25.75	1.50
C O R R E L A T I O N S										
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
(+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.12	0.01	0.02	0.18	0.07	0.37++	0.06	-0.22
DAYS TO FLOWER	1.00	0.41++	0.01	0.41++	-0.34++	-0.24	-0.17	0.43++	0.58++	-0.31+
DAYS TO MATURITY	0.01	0.41++	1.00	1.00	-0.49++	-0.43++	-0.09	0.31+	0.25	-0.38++
NODULE NUMBER 1	0.02	-0.34++	-0.49++	1.00	0.77++	0.11	-0.24	-0.24	-0.42++	0.03
NODULE NUMBER 2	0.18	-0.24	-0.43++	0.77++	1.00	-0.21	0.07	0.38++	-0.38++	0.0
NODULE WEIGHT 1	0.07	-0.17	-0.09	0.11	-0.21	0.07	-0.11	1.00	-0.15	-0.07
NODULE WEIGHT 2	0.37++	0.43++	0.31+	0.31+	-0.24	0.07	-0.11	1.00	0.44++	-0.19
PLANT HEIGHT	0.06	0.58++	0.25	0.38++	-0.42++	-0.38++	-0.15	0.44++	1.00	-0.02
LODGING	-0.22	-0.31+	-0.38++	0.03	0.0	0.0	-0.07	-0.19	-0.02	1.00
SHATTER	-0.03	0.02	-0.05	-0.09	-0.12	-0.12	-0.11	-0.13	-0.09	-0.04
HARVEST	-0.08	0.11	-0.03	0.09	-0.37++	-0.20	-0.07	-0.12	0.10	-0.10
PODS PER PLANT	0.41++	0.31+	0.02	0.37++	0.20	0.25	-0.06	0.56++	0.46++	0.07
100 SEED WEIGHT	-0.02	-0.31+	-0.08	0.38++	0.25	0.25	-0.11	-0.24	-0.37++	-0.04
QUALITY OF SEED	-0.09	0.18	0.49++	-0.33++	-0.27+	-0.27+	-0.24	0.11	0.07	-0.21

TABLE 68 EXPERIMENT 139 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
15	S.J.2	1.00	218.25	22.73	18.80	2.25	43.1	23.4
3	HARDEE	1.00	214.25	19.63	18.19	2.75	41.4	25.2
5	BOSSIER	1.00	224.00	16.90	18.24	2.00	44.1	24.3
13	WILLIAMS	1.00	218.25	13.40	22.46	2.00	43.6	23.9
2	HAMPTON 266A	1.00	202.25	15.35	22.06	2.25	39.9	25.3
7	DAVIS	1.00	201.75	14.53	18.20	2.25	42.3	23.4
4	IMPROVED PELICAN	1.00	226.25	23.63	15.00	2.25	43.5	24.6
8	TRACY	1.00	232.00	10.25	19.59	2.00	42.9	23.4
9	FORREST	1.00	231.00	15.40	16.55	4.25	40.5	24.4
6	BRAGG	1.25	233.00	13.40	19.48	2.75	42.0	24.0
14	PB-1	1.00	224.75	22.13	15.82	1.00	45.5	20.3
10	HILL	1.00	226.50	15.00	15.75	1.50	40.9	24.0
11	CLARK 63	1.00	216.25	13.63	19.98	2.25	43.8	23.4
1	JUPITER	1.00	223.25	15.78	16.38	3.25	40.0	25.4
12	BONUS	1.00	230.50	10.75	21.61	3.00	43.8	24.2
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								

C O R R E L A T I O N S								
(+ - PROB=.05 +- - PROB=.01)								
YIELD	KG/HA	-0.03	-0.08	0.41++	-0.02	-0.09		
DAYS TO FLOWER		0.02	0.11	0.31+	-0.31+	0.18		
DAYS TO MATURITY		-0.05	-0.03	0.02	-0.08	0.49++		
NODULE NUMBER 1		-0.09	0.09	-0.37++	0.38++	-0.33++		
NODULE NUMBER 2		-0.12	0.05	-0.20	0.25	-0.27+		
NODULE WEIGHT 1		-0.11	-0.07	-0.06	0.11	-0.24		
NODULE WEIGHT 2		-0.13	-0.12	0.56++	-0.24	0.11		
PLANT	HEIGHT	-0.09	0.10	0.46++	-0.37++	0.07		
LODGING		-0.04	-0.10	0.07	-0.04	-0.21		
SHATTER		1.00	0.07	-0.09	0.07	0.09		
PLANTS	HARVEST	0.07	1.00	-0.13	-0.08	0.05		
PODS PER PLANT		-0.09	-0.13	1.00	-0.39++	-0.15		
100 SEED WEIGHT		0.07	-0.08	-0.39++	1.00	-0.06		
QUALITY OF SEED		0.09	0.05	-0.15	-0.06	1.00		

TABLE 69

EXPERIMENT 97

YEAR 1974

REGION - ASIA
 SITE - RATMALAGARA
 LATITUDE - 7 DEG. 23 MIN. N
 DATE PLANTED - MAY 20, 1974
 SOIL TYPE - SILT
 FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
 AMOUNT OF MOISTURE - 456 MM
 NUMBER OF IRRIGATIONS - SEVERAL, BY HAND
 LOCAL VARIETIES - PB-1, S.J.2

COUNTRY - SRI LANKA
 COOPERATOR - M. MARTIN, A. SILVA
 ELEVATION - 30 M
 DATE HARVESTED - AUGUST, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE 1 WEIGHT	PLANT HEIGHT	LODGING
3	HARDEE	1477.78	28.75	105.50	85.75	180.25	0.50	0.25	1.47	30.00	1.00
9	FORREST	1450.56	22.75	89.75	51.75	86.00	0.22	0.22	0.77	31.75	1.00
2	HAMPTON 266A	1422.71	22.50	98.25	68.50	124.50	0.20	0.20	0.79	29.75	1.00
14	PB-1	1316.92	30.75	93.25	80.00	203.50	0.43	0.43	1.33	48.25	2.25
6	BRAGG	1145.55	23.00	105.75	59.25	130.75	0.21	0.21	1.03	30.25	1.25
13	WILLIAMS	1076.47	21.25	96.00	107.25	91.25	0.16	0.16	0.71	28.00	1.25
8	TRACY	1052.26	23.00	88.50	58.50	112.00	0.19	0.19	1.55	27.00	1.00
7	DAVIS	1043.69	22.00	102.75	29.50	93.25	0.11	0.11	0.75	28.25	1.25
4	IMPROVED PELICAN	1011.84	29.75	113.25	39.50	86.50	0.15	0.15	0.56	62.75	2.25
15	S.J.2	991.14	30.75	105.00	50.25	86.25	0.34	0.34	0.57	49.25	1.75
11	CLARK 63	962.61	22.50	85.50	70.50	85.25	0.27	0.27	0.90	38.00	2.00
10	HILL	931.57	25.00	79.50	36.00	82.00	0.19	0.19	0.57	26.75	2.00
5	BOSSIER	814.18	31.50	112.75	68.75	127.00	0.40	0.40	1.20	31.00	1.25
12	BONUS	794.55	23.25	98.25	44.00	44.50	0.08	0.08	0.58	23.50	1.00
1	JUPITER	296.16	35.25	133.50	59.00	65.25	0.33	0.33	0.91	54.00	1.25
	GRAND MEAN	1052.53	26.13	100.50	60.57	106.55	0.25	0.25	0.91	35.90	1.43
	STANDARD ERROR OF A VARIETY MEAN	197.31	0.40	2.30	9.27	17.74	0.05	0.05	0.21	3.33	0.23
	COEFFICIENT OF VARIATION	37.49%	3.03%	4.58%	30.61%	33.30%	38.35%	38.35%	46.83%	18.53%	32.77%
	5% LSD VARIETY MEANS (*****=NS)	563.14	1.13	6.57	26.46	50.63	0.14	0.14	0.61	9.49	0.67

C O R R E L A T I O N S

	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE 1 WEIGHT	PLANT HEIGHT	LODGING
YIELD	1.00	-0.24	-0.29+	0.20	0.23	0.08	0.08	0.06	0.07	0.23
DAYS TO FLOWER	-0.24	1.00	0.65++	0.00	0.17	0.53++	0.53++	0.12	0.63++	0.23
DAYS TO MATURITY	-0.29+	0.65++	1.00	-0.05	-0.06	0.17	0.17	-0.06	0.44++	-0.09
NODULE NUMBER 1	0.20	0.00	-0.05	1.00	0.37++	0.53++	0.53++	0.36++	-0.08	-0.09
NODULE NUMBER 2	0.23	0.17	-0.06	0.37++	1.00	0.51++	0.51++	0.71++	-0.06	-0.05
NODULE WEIGHT 1	0.08	0.53++	0.17	0.53++	0.51++	1.00	1.00	0.50++	0.12	-0.00
NODULE WEIGHT 2	0.06	0.12	-0.06	0.36++	0.51++	0.50++	0.50++	0.17	-0.17	-0.16
PLANT	0.07	0.63++	0.44++	-0.08	-0.06	0.12	0.12	1.00	0.62++	1.00
LODGING	0.23	0.23	-0.09	-0.09	-0.05	-0.00	-0.00	-0.16	0.62++	1.00
SHATTER	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	-0.03	0.01	-0.02	0.20	0.12	0.29+	0.29+	0.06	-0.17	-0.10
PODS PER PLANT	0.46++	0.44++	0.22	-0.06	0.22	0.23	0.23	-0.03	0.70++	0.49++
100 SEED WEIGHT	-0.21	-0.32+	0.23	0.07	-0.32+	-0.39++	-0.39++	-0.04	-0.34++	-0.46++
QUALITY OF SEED	-0.41++	0.45++	0.73++	-0.09	-0.31+	-0.08	-0.08	-0.17	0.34++	-0.14

(+ - PROB=.05 ++ - PROB=.01)

TABLE 69 EXPERIMENT 97 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
3	HARDEE	1.00	194.00	23.00	15.73	1.25	41.2	26.4
9	FOREST	1.00	199.75	17.75	16.27	1.25	41.3	23.5
2	HAMPTON 266A	1.00	196.75	17.50	21.01	1.50	38.5	27.3
14	PB-1	1.00	198.00	27.25	12.74	1.00	42.0	22.1
6	BRAGG	1.00	196.25	17.75	19.78	2.00	42.6	24.0
13	WILLIAMS	1.00	198.25	8.50	21.87	2.00	41.9	25.4
8	TRACY	1.00	194.25	12.25	20.23	1.75	46.7	22.7
7	DAVIS	1.00	198.75	17.00	18.40	1.50	42.1	25.7
4	IMPROVED PELICAN	1.00	190.75	26.50	14.54	1.75	42.3	25.2
15	S.J.2	1.00	198.00	24.50	12.29	2.50	41.5	24.9
11	CLARK 63	1.00	195.50	14.75	16.35	1.00	43.0	23.3
10	HILL	1.00	196.00	13.50	16.26	1.00	40.5	23.7
5	BOSSIER	1.00	199.25	17.00	17.10	1.75	42.0	25.3
12	BONDS	1.00	190.50	8.00	21.49	2.25	43.5	24.2
1	JUPITPR	1.00	197.50	17.25	23.05	5.00	43.9	25.7
	GRAND MEAN	1.00	196.23	17.50	17.81	1.83	42.2	24.6
	STANDARD ERROR OF A VARIETY MEAN	0.00	2.23	2.88	0.28	0.31		
	COEFFICIENT OF VARIATION	0.00%	2.28%	32.88%	3.19%	33.91%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	*****	8.21	0.81	0.89		
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)								
YIELD	KG/HA	0.00	-0.03	0.46++	-0.21	-0.41++		
DAYS TO FLOWER		0.00	0.01	0.44++	-0.32+	0.45++		
DAYS TO MATURITY		0.00	-0.02	0.22	0.23	0.73++		
NODULE NUMBER 1		0.00	0.20	-0.06	0.07	-0.09		
NODULE NUMBER 2		0.00	0.12	0.22	-0.32+	-0.31+		
NODULE WEIGHT 1		0.00	0.29+	0.23	-0.39++	-0.08		
NODULE WEIGHT 2		0.00	0.06	-0.03	-0.04	-0.17		
PLANT	HEIGHT	0.00	-0.17	0.70++	-0.34++	0.34++		
LODGING		0.00	-0.10	0.49++	-0.46++	-0.14		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS	HARVEST	0.00	1.00	-0.14	-0.03	-0.06		
PODS PER	PLANT	0.00	-0.14	1.00	-0.51++	-0.02		
100 SEED	WEIGHT	0.00	-0.03	-0.51++	1.00	0.43++		
QUALITY	OF SEED	0.00	-0.06	-0.02	0.43++	1.00		

TABLE 70 EXPERIMENT 121 YEAR 1974

REGION - ASIA COUNTRY - SRI LANKA
 SITE - RATNALAGARA COOPERATOR - M. MARTIN, T. KEERTHIRATHNA
 LATITUDE - 7 DEG. 23 MIN. N ELEVATION - 30 M
 DATE PLANTED - NOVEMBER 7, 1974 DATE HARVESTED - JANUARY, 1975
 SOIL TYPE - SILT
 FERTILIZER USED (KG/HA) - N 20.0, P 26.4, K 33.2
 AMOUNT OF MOISTURE - 226 MM
 NUMBER OF IRRIGATIONS - SEVERAL, BY HAND
 LOCAL VARIETIES - PB-1, S.J.2

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
3	HARDEE	573.03	25.00	78.00	36.75	43.75	0.07	0.16	25.00	1.00
10	HILL	541.77	24.00	68.00	34.00	36.25	0.06	0.14	12.25	1.25
7	DAVIS	468.84	24.00	75.75	39.75	54.50	0.08	0.16	23.25	1.00
4	IMPROVED PELICAN	448.01	26.25	73.00	25.75	63.00	0.06	0.19	33.50	1.00
1	JUPITER	437.59	29.00	83.50	35.00	45.50	0.10	0.23	45.50	2.00
12	BONUS	416.75	22.00	71.50	13.75	27.25	0.03	0.08	27.25	1.00
11	CLARK 63	416.75	21.50	75.75	31.50	35.75	0.06	0.11	31.50	1.00
13	WILLIAMS	416.75	22.00	75.25	33.25	26.00	0.07	0.10	26.50	1.00
5	BOSSIER	385.49	25.50	76.25	62.50	88.00	0.11	0.21	32.25	1.50
2	HAMPTON 266A	333.40	22.00	72.25	22.75	25.00	0.04	0.05	26.50	1.00
6	BRAGG	291.72	23.75	75.25	11.25	24.25	0.02	0.08	28.75	1.00
9	FORREST	281.31	23.00	71.00	21.25	20.50	0.04	0.06	30.00	1.25
8	TRACY	260.47	22.00	69.00	18.75	28.25	0.03	0.14	15.75	1.00
15	S.J.2	239.63	29.00	75.00	18.75	28.75	0.04	0.13	36.00	1.50
14	PB-1	218.79	25.75	72.25	26.25	37.00	0.07	0.12	29.25	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		382.02	24.32	74.12	28.75	38.92	0.06	0.13	28.22	1.17
COEFFICIENT OF VARIATION		89.81	0.25	1.32	8.59	10.76	0.02	0.04	2.76	0.17
5% LSD VARIETY MEANS (*****=NS)		47.02%	2.03%	3.55%	59.75%	55.30%	55.31%	60.83%	19.59%	28.88%
		*****	0.70	3.75	24.51	30.71	0.05	*****	7.89	0.48
C O R R E L A T I O N S										
		(+ - PROB=.05		++ - PROB=.01)						
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.04		0.20	0.19	0.29+	0.10	0.15	0.22	0.00
DAYS TO MATURITY		1.00		0.42++	0.10	0.27+	0.21	0.40++	0.47++	0.47++
NODULE NUMBER 1		0.19		0.20	0.20	0.16	0.30+	0.19	0.66++	0.35++
NODULE NUMBER 2		0.29+		0.20	1.00	0.46++	0.86++	0.33++	0.06	0.05
NODULE WEIGHT 1		0.10		0.16	0.46++	1.00	0.38++	0.83++	0.17	-0.08
NODULE WEIGHT 2		0.15		0.30+	0.86++	0.38++	1.00	0.38++	0.17	0.15
PLANT HEIGHT		0.22		0.19	0.33++	0.83++	0.38++	1.00	0.38++	-0.01
LODGING		0.00		0.66++	0.06	0.17	0.17	0.10	1.00	0.38++
SHATTER		0.13		0.47++	0.05	-0.08	0.15	-0.01	0.38++	1.00
HARVEST		0.05		0.28+	0.18	0.29+	0.25	0.43++	0.43++	0.34++
PODS PER PLANT		0.60++		-0.13	0.22	0.16	0.22	0.22	-0.01	0.10
100 SEED WEIGHT		0.35++		0.31+	0.12	0.19	0.06	0.19	0.37++	0.14
QUALITY OF SEED		0.01		0.12	0.04	-0.05	-0.07	-0.12	-0.04	-0.20
				0.50++	0.09	0.04	0.26+	0.21+	0.47++	0.49++

TABLE 70 EXPERIMENT 121 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED HEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
3	HARDEE	1.00	194.50	12.25	16.43	1.00	41.2	24.3
10	HILL	1.00	197.00	9.50	13.98	1.00	39.0	23.8
7	DAVIS	1.00	189.50	7.25	16.97	1.00	42.1	23.3
4	IMPROVED PELICAN	1.00	198.75	9.00	13.46	1.00	42.6	24.2
1	JUPITER	1.75	196.25	9.50	15.32	3.00	41.0	24.1
12	BONUS	1.00	195.50	6.50	17.20	1.00	41.5	23.9
11	CLARK 63	1.00	199.00	7.25	17.14	1.00	40.2	25.2
13	WILLIAMS	1.00	195.75	6.50	18.29	1.00	41.1	25.2
5	BOSSIER	1.25	195.00	7.25	15.00	1.00	41.7	24.2
2	HAMPTON 266A	1.00	195.75	5.50	17.57	1.00	40.4	24.7
6	BAGG	1.00	146.25	7.75	17.60	1.00	42.6	23.4
9	FORREST	1.25	197.25	7.00	13.62	1.50	40.3	24.8
8	TRACY	1.00	193.75	4.75	16.80	1.00	41.5	23.2
15	S.J.2	1.25	197.75	10.50	12.20	1.00	42.2	23.9
14	PB-1	1.00	199.25	7.50	10.63	1.00	42.0	21.4
	GRAND MEAN	1.10	192.75	7.87	15.48	1.17	41.3	24.0
	STANDARD ERROR OF A VARIETY MEAN	0.16	6.32	1.60	0.65	0.07		
	COEFFICIENT OF VARIATION	28.98%	6.56%	40.80%	8.38%	12.78%		
	5% LSD VARIETY MEANS (*****=NS)	*****	18.04	*****	1.85	0.21		
C O R R E L A T I O N S								
		(+ - PROB=.05	++ - PROB=.01)					
YIELD	KG/HA	0.13	0.05	0.60++	0.35++	0.01		
DAYS TO FLOWER		0.36++	0.13	0.30+	-0.57++	0.46++		
DAYS TO MATURITY		0.28+	-0.13	0.31+	0.12	0.50++		
NODULE NUMBER 1		0.18	0.22	0.12	0.04	0.09		
NODULE NUMBER 2		0.29+	0.16	0.19	-0.05	0.04		
NODULE WEIGHT 1		0.25	0.22	0.06	-0.07	0.26+		
NODULE WEIGHT 2		0.43++	0.22	0.11	-0.12	0.27+		
PLANT	HEIGHT	0.43++	-0.01	0.37++	-0.04	0.47++		
LODGING		0.34++	0.10	0.14	-0.20	0.49++		
SHATTER		1.00	0.03	0.26+	-0.04	0.55++		
PLANTS	HARVEST	0.03	1.00	-0.25	-0.28+	0.06		
PODS PER	PLANT	0.26+	-0.25	1.00	0.04	0.09		
100 SEED	WEIGHT	-0.04	-0.28+	0.04	1.00	-0.08		
QUALITY	OF SEED	0.55++	0.06	0.09	-0.08	1.00		

TABLE 71 EXPERIMENT 138 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
4	IMPROVED PELICAN	1.00	197.75	45.25	16.76	1.00	44.1	23.1
5	BOSSIER	1.00	197.00	26.75	19.04	1.00	42.3	24.9
14	PB-1	1.00	198.75	42.75	14.53	1.00	41.1	21.2
15	S.J.2	1.00	198.75	39.75	16.94	1.00	44.5	22.2
1	JUPITER	1.00	197.00	31.50	21.48	1.00	42.8	24.9
13	WILLIAMS	1.00	199.50	26.25	21.05	1.00	43.2	24.8
3	HARDEF	1.00	199.00	33.75	18.41	1.00	42.3	24.2
11	CLARK 63	1.00	198.50	27.50	19.64	1.00	42.6	24.5
7	DAVIS	1.00	198.25	31.75	18.40	1.00	39.3	24.8
10	HILL	1.00	198.75	23.25	18.75	1.00	40.1	23.1
2	HAMPTON 266A	1.00	196.75	26.75	22.29	1.00	39.2	26.6
12	BONUS	1.00	199.50	30.50	20.76	1.00	41.3	24.9
9	FORREST	1.00	199.25	32.00	17.02	1.00	41.1	23.7
6	BRAGG	1.00	198.75	28.25	20.11	1.00	41.0	24.3
8	TRACY	1.00	199.50	25.75	21.04	1.00	43.3	23.4
	GRAND MEAN	1.00	198.47	31.45	19.08	1.00	41.9	24.0
	STANDARD ERROR OF A VARIETY MEAN	0.00	0.67	2.84	0.47	0.00		
	COEFFICIENT OF VARIATION	0.00%	0.67%	18.08%	4.92%	0.00%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	1.90	8.12	1.34	0.00		
C O R R E L A T I O N S								
(+ - PROB=.05 +- - PROB=.01)								
YIELD	KG/HA	0.00	-0.23	0.44++	-0.29+	0.00		
DAYS TO FLOWER		0.00	-0.31+	0.29+	-0.22	0.00		
DAYS TO MATURITY		0.00	-0.40++	0.26+	-0.07	0.00		
NODULE NUMBER 1		0.00	0.01	-0.10	0.05	0.00		
NODULE NUMBER 2		0.00	-0.28+	0.09	-0.13	0.00		
NODULE WEIGHT 1		0.00	0.17	-0.19	0.01	0.00		
NODULE WEIGHT 2		0.00	-0.03	-0.04	-0.11	0.00		
PLANT	HEIGHT	0.00	-0.10	0.58++	-0.35++	0.00		
LODGING		0.00	-0.16	0.51++	-0.26+	0.00		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS	HARVEST	0.00	1.00	0.07	-0.09	0.00		
PODS PER	PLANT	0.00	0.07	1.00	-0.56++	0.00		
100 SEED	WEIGHT	0.00	-0.09	-0.56++	1.00	0.00		
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00		

TABLE 72 EXPERIMENT 1 YEAR 1974

REGION - ASIA
 SITE - SHANHUA
 LATITUDE - 22 DEG. 30 MIN. N
 DATE PLANTED - SEPTEMBER 14, 1974
 SOIL TYPE - SILT, PH 7.8
 FERTILIZER USED (KG/HA) - N 30.0, P 43.6, K 66.6
 AMOUNT OF MOISTURE - 46 MM
 NUMBER OF IRRIGATIONS - 2

COUNTRY - TAIWAN
 COOPERATOR - S. SHANMUGASUNDARAM
 ELEVATION - 9 M
 DATE HARVESTED - NOVEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
4	IMPROVED PELICAN	388.41	33.75	92.00	82.00	244.25	0.13	0.66	60.50	1.00
5	BOSSIER	343.82	33.75	92.00	102.50	329.00	0.11	0.72	41.50	1.00
8	TRACY	341.73	25.25	76.00	103.00	235.00	0.11	0.43	24.75	1.00
12	BONUS	341.32	23.25	76.00	86.50	181.50	0.11	0.30	38.25	1.00
13	WILLIAMS	322.98	26.00	76.00	78.75	179.75	0.09	0.25	27.50	1.00
14	CALLAND	315.06	24.50	76.00	44.00	131.25	0.03	0.23	34.00	1.00
11	CLARK 63	287.97	24.50	76.00	61.25	155.00	0.08	0.32	36.00	1.00
10	HILL	257.13	28.50	76.00	64.25	193.00	0.04	0.18	21.00	1.00
7	DAVIS	219.21	28.00	92.00	91.25	176.75	0.14	0.41	25.50	1.00
1	JUPIER	209.63	33.75	92.00	61.00	215.00	0.08	0.72	59.50	1.00
15	SEMES	199.21	27.50	76.00	53.25	168.75	0.05	0.17	18.25	1.00
6	BRAGG	197.96	27.50	76.00	29.75	207.00	0.05	0.18	27.25	1.00
9	FORREST	174.62	27.75	76.00	57.25	171.25	0.04	0.15	26.25	1.00
3	HARDEE	125.02	29.00	92.00	112.50	299.00	0.08	0.38	22.25	1.00
2	HAMPTON 266A	85.85	29.00	76.00	101.00	269.00	0.10	0.37	21.25	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		254.00	28.13	81.33	75.22	210.37	0.08	0.37	32.25	1.00
COEFFICIENT OF VARIATION		30.15	0.30	0.00	21.03	43.83	0.03	0.10	3.50	0.00
5% LSD VARIETY MEANS (*****=NS)		23.74%	2.13%	0.00%	55.92%	41.67%	71.26%	54.14%	21.73%	0.00%
		86.05	0.86	0.00	*****	*****	*****	0.28	10.00	0.00
C O R R E L A T I O N S										
(* - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.07								
DAYS TO MATURITY		1.00								
NODULE NUMBER 1		0.02								
NODULE NUMBER 2		0.09								
NODULE WEIGHT 1		0.26+								
NODULE WEIGHT 2		0.22								
PLANT HEIGHT		0.32+								
LODGING		0.49++								
SHATTER		0.00								
HARVEST		0.00								
PLANTS PER 100 SEED		0.64++								
QUALITY OF SEED		0.45++								
		0.31+								
		0.07								
		0.21								
		0.30+								
		-0.43++								
		-0.03								
		0.17								
		0.84++								
		0.08								
		0.34++								
		0.28+								
		0.14								
		0.35++								
		-0.23								
		-0.04								
		-0.07								
		-0.30+								
		0.29+								
		0.48++								
		0.40++								
		0.48++								
		0.35++								
		0.29+								
		0.16								
		0.49++								
		0.57++								
		0.47++								
		0.35++								
		0.32+								
		0.26+								
		0.12								
		0.55++								
		0.49++								
		0.36++								
		1.00								
		0.66++								
		0.52++								
		1.00								
		0.55++								
		1.00								
		0.00								
		0.00								
		0.00								
		0.00								
		0.31+								
		0.48++								
		0.40++								
		-0.23								
		-0.05								
		0.29+								
		0.29+								

TABLE 72 EXPERIMENT 1 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
4	IMPROVED PELICAN	1.00	155.50	35.33	8.25	2.25	45.7	17.4
5	BOSSIER	1.00	154.25	28.98	9.75	1.75	45.6	17.0
8	TRACY	1.00	168.25	20.03	12.75	1.25	46.2	16.6
12	BONUS	1.00	180.75	19.68	11.50	1.25	45.2	17.6
13	WILLIAMS	1.00	143.75	17.90	11.25	1.50	44.3	17.5
14	CALLAND	1.00	150.50	22.53	11.50	2.50	43.7	16.7
11	CLARK 63	1.00	163.75	21.55	10.75	1.50	44.7	17.4
10	HILL	1.00	69.25	23.85	11.00	1.50	40.6	19.2
7	DAVIS	1.00	128.50	20.63	10.75	2.25	47.7	14.6
1	JUPITER	1.00	163.50	20.45	9.25	2.25	47.3	15.0
15	SEMMES	1.00	149.50	14.58	9.50	1.75	45.0	16.7
6	BAGG	1.00	142.25	19.00	10.75	2.00	45.7	16.1
9	FORREST	1.00	105.25	22.90	9.50	2.00	47.0	15.7
3	HARDEE	1.00	39.50	23.93	9.50	1.50	44.5	17.8
2	HAMPTON 266A	1.00	108.75	15.68	9.00	1.00	47.0	13.1
	GRAND MEAN	1.00	134.88	21.80	10.33	1.75	45.3	16.6
	STANDARD ERROR OF A VARIETY MEAN	0.00	14.82	2.29	0.42	0.24		
	COEFFICIENT OF VARIATION	0.00%	21.97%	21.03%	8.08%	27.03%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	42.30	6.54	1.19	0.68		
C O R R E L A T I O N S								
	YIELD	0.00	0.64++	0.45++	0.31+	0.07		
	KG/HA	0.00	-0.10	0.40++	-0.63++	0.21		
	DAYS TO FLOWER	0.00	-0.10	0.44++	-0.43++	0.30+		
	DAYS TO MATURITY	0.00	0.08	0.17	-0.03	-0.24		
	NODULE NUMBER 1	0.00	0.08	0.34++	-0.19	-0.30+		
	NODULE NUMBER 2	0.00	0.08	0.14	-0.04	-0.07		
	NODULE WEIGHT 1	0.00	0.31+	0.35++	-0.23	-0.05		
	NODULE WEIGHT 2	0.00	0.31+	0.40++	-0.29+	0.29+		
	PLANT	0.00	0.48++	0.40++	0.00	0.00		
	HEIGHT	0.00	0.00	0.00	0.00	0.00		
	LODGING	0.00	0.00	0.00	0.00	0.00		
	SHATTER	1.00	0.00	0.00	0.00	0.00		
	PLANTS	0.00	1.00	-0.06	0.20	0.04		
	HARVEST	0.00	-0.06	1.00	-0.22	0.24		
	PODS PER PLANT	0.00	0.20	-0.22	1.00	-0.16		
	100 SEED WEIGHT	0.00	0.04	0.24	-0.16	1.00		
	QUALITY OF SEED	0.00	0.04	0.24	-0.16	1.00		

(+ - PROB=-.01)

(+ - PROB=-.05)

TABLE 73

EXPERIMENT 80

YEAR 1974

REGION - ASIA
 SITE - CHIANG MAI
 LATITUDE - 18 DEG. 47 MIN. N
 DATE PLANTED - JULY 24, 1974
 FERTILIZER USED (KG/HA) - N 25.0, P 75.0, K 100.0
 LOCAL VARIETIES - S.J.1, S.J.2

COUNTRY - THAILAND
 COOPERATOR - S. JULSRIGIVAL, D. TIYAWALEE
 ELEVATION - 314 M
 DATE HARVESTED - OCTOBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
4	IMPROVED PELICAN	1010.79	32.25	90.00	332.00	421.50	1.25	2.20	62.00	2.00
3	HARDEE	906.56	28.25	89.00	256.50	393.00	1.26	2.85	30.25	1.00
1	JUPITER	749.77	26.75	91.75	195.50	296.25	0.56	2.49	62.75	1.50
5	BOSSIER	747.52	32.25	93.00	340.75	602.75	1.73	3.75	54.00	2.50
14	CALLAND	740.69	21.50	85.25	245.25	336.50	1.09	3.38	39.25	1.00
17	S.J.2	730.44	33.50	90.00	255.00	444.00	1.72	2.97	47.75	1.75
16	S.J.1	653.09	30.00	76.75	282.25	240.50	2.40	1.87	60.00	2.50
10	HILL	558.19	28.50	85.50	297.25	374.50	1.09	2.21	34.00	1.50
15	SEMMES	524.60	27.50	85.75	340.25	442.25	1.29	2.04	33.00	1.00
7	DAVIS	475.64	28.25	86.75	292.50	388.00	1.41	3.02	34.00	1.00
8	TRACY	449.67	23.00	86.75	323.50	348.25	1.14	3.00	32.75	1.00
13	WILLIAMS	433.75	21.50	85.25	362.25	410.00	0.84	1.96	32.50	1.00
9	FORREST	359.28	26.50	85.50	295.50	463.50	1.18	2.48	33.50	1.00
6	BRAGG	327.69	25.50	87.50	357.75	439.00	1.40	2.15	37.25	1.00
11	CLARK 63	302.10	21.50	84.75	277.25	289.50	0.76	1.57	33.50	1.00
12	BONUS	301.23	21.50	84.25	284.25	352.00	0.81	1.78	38.50	1.00
2	HAMPTON 266A	127.69	26.00	85.50	252.00	281.50	1.30	1.78	36.50	1.00
GRAND MEAN		552.87	26.72	86.59	293.51	383.71	1.25	2.44	41.26	1.34
STANDARD ERROR OF A VARIETY MEAN		60.89	0.59	1.10	34.09	36.99	0.23	0.28	2.86	0.30
COEFFICIENT OF VARIATION		22.03%	4.42%	2.55%	23.23%	19.28%	36.52%	22.78%	13.86%	45.01%
5% LSD VARIETY MEANS (*****=NS)		173.15	1.68	3.14	*****	105.18	0.65	0.79	8.13	0.86
C O R R E L A T I O N S										
(+ - PROB=-.05 ++ - PROB=-.01)										
YIELD	KG/HA	1.00	0.50++	0.24+	-0.07	0.14	0.20	0.38++	0.51++	0.37++
DAYS TO FLOWER	0.50++	1.00	0.32++	0.03	0.03	0.33++	0.50++	0.22	0.49++	0.46++
DAYS TO MATURITY	0.24+	0.24+	0.32++	1.00	-0.11	0.39++	-0.28+	0.32++	0.09	0.05
NODULE NUMBER 1	-0.07	-0.07	0.03	-0.11	1.00	0.34++	0.47++	-0.04	-0.07	-0.08
NODULE NUMBER 2	0.14	0.14	0.33++	0.39++	0.34++	1.00	0.19	0.57++	-0.01	0.12
NODULE WEIGHT 1	0.20	0.20	0.50++	-0.28+	0.47++	0.19	1.00	0.19	0.24+	0.23
NODULE WEIGHT 2	0.38++	0.38++	0.22	0.32++	-0.04	0.57++	0.19	1.00	0.11	0.24
PLANT	HEIGHT	0.51++	0.49++	0.09	-0.07	-0.01	0.24+	1.00	0.54++	0.54++
LODGING	0.37++	0.37++	0.46++	0.05	-0.08	0.12	0.23	0.24	0.00	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.40++	0.33++	0.11	-0.10	0.05	0.19	0.08	0.32++	0.27+
PODS PER PLANT	0.79++	0.79++	0.69++	0.41++	-0.05	0.22	0.22	0.29+	0.60++	0.35++
100 SEED WEIGHT	-0.19	-0.19	-0.58++	0.19	0.12	0.01	-0.38++	0.10	-0.35++	-0.25+
QUALITY OF SEED	-0.40++	-0.40++	-0.32++	0.11	-0.06	-0.12	-0.32++	-0.04	-0.17	-0.01

TABLE 73 EXPERIMENT 80 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
4	IMPROVED PELICAN	1.00	194.25	31.00	9.60	1.50
3	HARDEE	1.00	171.00	23.75	11.37	1.25
1	JUPITER	1.00	189.25	26.00	11.59	2.50
5	BOSSIER	1.00	200.00	25.50	12.92	1.25
14	CALLAND	1.00	190.25	14.50	12.82	1.75
17	S.J.2	1.00	173.75	27.50	8.61	1.50
16	S.J.1	1.00	188.50	19.50	8.76	1.25
10	HILL	1.00	188.50	14.75	11.97	2.25
15	SEMMES	1.00	194.75	16.50	10.29	1.00
7	DAVIS	1.00	181.00	15.00	10.85	1.50
8	TRACY	1.00	135.25	12.00	14.84	2.75
13	WILLIAMS	1.00	157.50	11.25	13.75	2.00
9	FORREST	1.00	162.25	17.50	9.80	2.75
6	BRAGG	1.00	181.75	12.00	11.26	2.00
11	CLARK 63	1.00	152.75	11.25	12.17	2.00
12	BONUS	1.00	162.75	11.00	13.19	2.50
2	HAMPTON 266A	1.00	180.25	8.75	10.01	1.75
	GRAND MEAN	1.00	176.69	17.51	11.40	1.85
	STANDARD ERROR OF A VARIETY MEAN	0.00	11.61	1.66	0.31	0.34
	COEFFICIENT OF VARIATION	0.00%	13.14%	18.99%	5.49%	36.44%
	5% LSD VARIETY MEANS (*****=NS)	0.00	33.00	4.73	0.89	0.96
C O R R E L A T I O N S						
			(+ - PROB=.05		++ - PROB=.01)	
	YIELD KG/HA	0.00	0.40++	0.79++	-0.19	-0.40++
	DAYS TO FLOWER	0.00	0.33++	0.69++	-0.58++	-0.32++
	DAYS TO MATURITY	0.00	0.11	0.41++	0.19	0.11
	NODULE NUMBER 1	0.00	-0.10	-0.05	0.12	-0.06
	NODULE NUMBER 2	0.00	0.05	0.22	0.01	-0.12
	NODULE WEIGHT 1	0.00	0.19	0.22	-0.38++	-0.32++
	NODULE WEIGHT 2	0.00	0.08	0.29+	0.10	-0.04
	PLANT HEIGHT	0.00	0.32++	0.60++	-0.35++	-0.17
	LODGING	0.00	0.27+	0.35++	-0.25+	-0.01
	SHATTER	1.00	0.00	0.00	0.00	0.00
	HARVEST	0.00	1.00	0.23	-0.28+	-0.26+
	PLANTS PER PLANT	0.00	0.23	1.00	-0.39++	-0.30+
	PODS PER PLANT	0.00	-0.28+	-0.39++	1.00	0.30+
	100 SEED WEIGHT	0.00	-0.26+	-0.30+	0.30+	1.00
	QUALITY OF SEED	0.00				

TABLE 74 EXPERIMENT 111

YEAR 1974

REGION - ASIA
 SITE - KHON KAEN
 LATITUDE - 16 DEG. N
 DATE PLANTED - NOVEMBER 20, 1974
 SOIL TYPE - SAND, PH 6.0
 FERTILIZER USED (KG/HA) - N 18.7, P 32.2, K 62.2
 AMOUNT OF MOISTURE - 81 MM
 NUMBER OF IRRIGATIONS - 7

COUNTRY - THAILAND
 COOPERATOR - T. CHAROENWATANA
 ELEVATION - 185 M
 DATE HARVESTED - FEBRUARY, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
7	DAVIS	936.44	32.50	90.00	45.00	52.25	0.57	0.67	21.00	0.00
5	BOSSIER	806.41	34.25	86.00	73.00	18.75	0.82	0.28	24.50	0.00
1	JUPITER	747.23	36.50	91.00	51.25	33.25	0.58	0.52	31.25	0.00
2	HAMPTON 266A	657.63	22.75	88.00	76.00	37.00	0.58	0.42	16.75	0.00
8	TRACY	633.88	22.00	81.75	20.00	37.25	0.26	0.48	14.50	0.00
4	IMPROVED PELICAN	616.79	35.50	85.75	53.00	30.50	0.61	0.39	22.00	0.00
9	FORREST	580.95	29.50	84.75	58.25	29.00	0.54	0.36	20.00	0.00
15	SEMMES	559.28	21.50	87.50	59.75	29.25	0.62	0.27	13.75	0.00
13	WILLIAMS	545.11	22.75	87.50	53.50	39.50	0.48	0.36	16.25	0.00
10	HILL	515.10	34.00	84.25	43.50	40.50	0.41	0.52	18.25	0.00
11	CLARK 63	496.35	21.75	86.50	37.00	27.25	0.35	0.27	15.50	0.00
6	BRAGG	489.26	25.50	86.75	81.50	48.50	0.63	0.59	21.00	0.00
14	CALLAND	382.58	22.00	86.50	51.25	23.00	0.60	0.52	18.50	0.00
12	BONUS	328.82	22.00	86.00	26.50	22.50	0.24	0.32	15.50	0.00
3	HARDEE	167.53	31.00	89.50	38.25	42.00	0.53	0.78	9.75	0.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	0.20	0.36++	0.32+	0.02	0.33++	-0.00	0.63++	0.00
DAYS TO FLOWER		0.20	1.00	0.20	0.11	0.07	0.21	0.11	0.51++	0.00
DAYS TO MATURITY		0.36++	0.20	1.00	0.55++	0.16	0.53++	0.23	0.31+	0.00
NODULE NUMBER 1		0.32+	0.11	0.55++	1.00	0.25	0.90++	0.27+	0.22	0.00
NODULE NUMBER 2		0.02	0.07	0.16	0.25	1.00	0.26+	0.91++	-0.12	0.00
NODULE WEIGHT 1		0.33++	0.21	0.53++	0.90++	0.26+	1.00	0.33+	0.23	0.00
NODULE WEIGHT 2		-0.00	0.11	0.23	0.27+	0.91++	0.33+	1.00	-0.06	0.00
PLANT HEIGHT		0.63++	0.51++	0.31+	0.22	-0.12	0.23	-0.06	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.52++	0.20	0.16	0.36++	-0.09	0.32+	-0.09	0.62++	0.00
PODS PER PLANT		0.53++	0.43++	0.12	-0.04	-0.08	-0.01	-0.04	0.49++	0.00
100 SEED WEIGHT		0.28+	-0.59++	0.33++	0.18	-0.17	0.09	-0.09	-0.03	0.00
QUALITY OF SEED		-0.43++	-0.01	-0.22	-0.17	-0.26+	-0.12	-0.24	0.03	0.00

TABLE 74 EXPERIMENT 111 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED.	PROTEIN PERCENT	OIL PERCENT
7	DAVIS	0.00	183.00	9.88	17.00	1.75	40.7	24.6
5	BOSSIER	0.00	280.50	6.15	14.25	3.00	38.9	26.0
1	JUPITER	0.00	230.00	11.10	14.50	3.75	38.6	25.4
2	HAMPTON 266A	0.00	199.25	5.02	19.75	2.75	40.9	24.3
8	TRACY	0.00	149.00	7.18	16.75	2.75	41.2	23.5
4	IMPROVED PELICAN	0.00	208.75	9.25	13.00	2.25	43.2	23.9
9	FORREST	0.00	117.00	13.18	13.25	3.75	39.1	25.1
13	SEMMES	0.00	141.75	7.30	17.50	2.50	43.1	24.0
15	WILLIAMS	0.00	184.00	5.48	18.75	3.00	38.8	25.0
10	HILL	0.00	215.00	7.05	13.00	2.75	37.3	24.8
11	CLARK 63	0.00	165.00	5.12	16.75	3.00	40.8	25.3
6	BRAGG	0.00	212.75	4.98	18.25	2.50	39.7	24.7
14	CALLAND	0.00	196.25	3.28	19.50	3.50	40.4	24.9
12	BONUS	0.00	203.25	3.45	17.75	3.00	41.7	25.1
3	HARDEE	0.00	57.50	5.80	15.25	3.00	41.7	24.7
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		0.00	182.87	6.95	16.35	2.88	40.4	24.8
COEFFICIENT OF VARIATION		0.00	22.92	1.21	0.91	0.30		
5% LSD VARIETY MEANS (*****=NS)		0.00	25.07%	34.72%	11.10%	20.91%		
			65.42	3.45	2.59	0.86		
C O R R E L A T I O N S								
			(+ - PROB=.05		++ - PROB=.01)			
YIELD	KG/HA	0.00	0.52++	0.53++	0.28+	-0.43++		
DAYS TO FLOWER		0.00	0.20	0.43++	-0.59++	-0.01		
DAYS TO MATURITY		0.00	0.16	0.12	0.33++	-0.22		
NODULE NUMBER 1		0.00	0.36++	-0.04	0.18	-0.17		
NODULE NUMBER 2		0.00	-0.09	-0.08	-0.17	-0.26+		
NODULE WEIGHT 1		0.00	0.32+	-0.01	0.09	-0.12		
NODULE WEIGHT 2		0.00	-0.09	-0.04	-0.09	-0.24		
PLANT HEIGHT		0.00	0.62++	0.49++	-0.03	0.03		
LODGING		0.00	0.00	0.00	0.00	0.00		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	0.02	0.19	-0.12		
PODS PER PLANT		0.00	0.02	1.00	-0.18	-0.12		
100 SEED WEIGHT		0.00	0.19	-0.18	1.00	-0.29+		
QUALITY OF SEED		0.00	-0.12	-0.12	-0.29+	1.00		

TABLE 75

EXPERIMENT 89

YEAR 1974

REGION - ASIA

SITE - MAEJO

LATITUDE - 18 DEG. 14 MIN. N

DATE PLANTED - JULY 10, 1974

SOIL TYPE - SANDY LOAM

FERTILIZER USED (KG/HA) - N 18.7, P 37.5, K 56.2

AMOUNT OF MOISTURE - 551 MM

LOCAL VARIETIES - S.J.1, S.J.2

COUNTRY - THAILAND

COOPERATOR - ARWOOTH NA-LAMPANG

ELEVATION - 317 M

DATE HARVESTED - OCTOBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
15	S.J.2	1461.46	42.75	97.75	408.75	385.25	2.80	2.55	2.80	2.55	77.25	3.00
4	IMPROVED PELICAN	1405.78	42.00	99.25	431.00	383.50	2.05	3.10	2.05	3.10	81.25	2.25
3	HARDEE	1337.73	38.00	99.50	549.75	488.50	2.98	3.05	2.98	3.05	31.25	1.00
14	S.J.1	1195.24	42.25	90.50	323.25	290.50	2.98	2.58	2.98	2.58	83.75	2.25
11	CLARK 63	1137.44	31.25	85.00	506.25	480.00	2.73	2.75	2.73	2.75	42.75	1.00
10	HILL	1126.43	36.50	85.50	378.50	405.50	2.10	2.63	2.10	2.63	35.25	1.00
8	TRACY	999.87	35.25	88.00	419.50	493.75	2.95	3.10	2.95	3.10	29.00	1.00
5	BOSSIER	997.78	39.00	102.00	563.50	494.00	3.13	2.75	3.13	2.75	41.25	1.00
13	WILLIAMS	946.02	33.00	87.00	566.25	609.00	2.68	3.60	2.68	3.60	37.25	1.00
7	DAVIS	927.64	37.00	91.75	466.00	594.25	3.78	3.65	3.78	3.65	33.75	1.00
12	BONUS	918.18	31.50	83.00	526.50	600.25	2.60	2.83	2.60	2.83	39.75	1.00
1	JUPITER	621.42	52.00	104.00	436.50	463.50	2.60	2.53	2.60	2.53	70.00	1.00
6	BRAGG	620.96	36.25	90.00	540.50	521.75	3.40	3.20	3.40	3.20	34.00	1.00
9	FORREST	402.37	36.00	90.75	408.50	502.50	2.45	2.68	2.45	2.68	31.25	1.00
2	HAMPTON 266A	348.07	35.75	87.00	460.00	472.50	2.35	3.25	2.35	3.25	27.00	1.00
GRAND MEAN												
STANDARD ERROR OF A VARIETY MEAN		963.09	37.90	92.07	465.65	478.98	2.77	2.95	2.77	2.95	46.32	1.30
COEFFICIENT OF VARIATION		83.41	0.73	0.37	44.03	41.49	0.32	0.32	0.32	0.32	2.04	0.09
5% LSD VARIETY MEANS (*****=NS)		17.32%	3.84%	0.81%	18.91%	17.33%	23.15%	21.88%	23.15%	21.88%	8.83%	14.21%
		238.06	2.08	1.06	125.67	118.43	0.92	*****	0.92	*****	5.83	0.26
C O R R E L A T I O N S												
		(+ - PROB=-.05 +- - PROB=-.01)										
YIELD	KG/HA	1.00	0.09	0.21	-0.08	-0.30+	-0.09	-0.15	-0.09	-0.15	0.46++	0.53++
DAYS TO FLOWER	0.09	0.21	1.00	0.77++	-0.30+	-0.38++	-0.08	-0.20	-0.08	-0.20	0.67++	0.40++
DAYS TO MATURITY	0.21	0.77++	1.00	1.00	0.01	-0.22	0.05	-0.13	0.05	-0.13	0.45++	0.29+
NODULE NUMBER 1	-0.08	-0.30+	-0.38++	0.01	1.00	0.48++	0.55++	0.41++	0.55++	0.41++	-0.34++	-0.33++
NODULE NUMBER 2	-0.30+	-0.30+	-0.38++	-0.22	0.48++	1.00	0.29+	0.65++	0.29+	0.65++	-0.51++	-0.49++
NODULE WEIGHT 1	-0.09	-0.09	-0.08	0.05	0.55++	0.29+	1.00	0.42++	1.00	0.42++	-0.13	-0.07
NODULE WEIGHT 2	-0.15	-0.20	-0.13	-0.13	0.41++	0.65++	0.42++	1.00	0.42++	1.00	-0.24	-0.15
PLANT HEIGHT	0.46++	0.46++	0.67++	0.45++	-0.34++	-0.51++	-0.07	-0.15	-0.07	-0.15	1.00	0.81++
LODGING	0.53++	0.53++	0.40++	0.29+	-0.33++	-0.49++	0.00	-0.15	0.00	-0.15	0.81++	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	0.30+	0.30+	0.06	-0.03	0.00	0.06	-0.03	-0.00	-0.03	-0.00	0.28+	0.18
PODS PER PLANT	0.51++	0.51++	0.32+	0.39++	-0.25	-0.40++	-0.11	-0.18	-0.11	-0.18	0.52++	0.73++
100 SEED WEIGHT	0.06	0.06	-0.41++	-0.23	0.21	0.43++	0.07	0.22	0.07	0.22	-0.58++	-0.52++
QUALITY OF SEED	-0.48++	-0.48++	0.18	0.03	0.02	-0.11	0.03	-0.08	0.03	-0.08	-0.08	-0.19

TABLE 75 EXPERIMENT 89 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
15	S.J.2	1.00	191.25	55.50	9.70	2.00
4	IMPROVED PELICAN	1.00	197.00	43.25	9.75	2.00
3	HARDEE	1.00	190.50	34.50	11.98	2.00
14	S.J.1	1.00	188.75	33.25	8.82	2.00
11	CLARK 63	1.00	197.75	27.00	11.90	2.25
10	HILL	1.00	192.00	32.50	11.53	2.00
8	TRACY	1.00	148.50	27.25	14.83	2.00
5	BOSSIER	1.00	177.25	32.50	11.48	2.00
13	WILLIAMS	1.00	188.75	21.75	12.00	2.00
7	DAVIS	1.00	194.00	29.50	11.30	2.00
12	BONUS	1.00	198.25	25.75	11.15	2.00
1	JUPITER	1.00	185.50	25.50	10.55	3.00
6	BRAGG	1.00	195.50	25.25	10.80	3.50
9	FORREST	1.00	141.00	31.75	10.03	2.00
2	HAMPTON 266A	1.00	187.50	30.00	10.13	3.00
	GRAND MEAN	1.00	184.90	31.68	11.06	2.25
	STANDARD ERROR OF A VARIETY MEAN	0.00	4.77	2.30	0.22	0.23
	COEFFICIENT OF VARIATION	0.00%	5.16%	14.55%	3.97%	20.76%
	5% LSD VARIETY MEANS (*****=NS)	0.00	13.61	6.58	0.63	0.67
C O R R E L A T I O N S						
	YIELD	0.00	0.30+	0.51++	0.06	-0.48++
	KG/HA	0.00	0.06	0.32+	-0.41++	0.18
	DAYS TO FLOWER	0.00	-0.03	0.39++	-0.23	0.03
	DAYS TO MATURITY	0.00	0.09	-0.25	0.21	0.02
	NODULE NUMBER 1	0.00	-0.06	-0.40++	0.43++	-0.11
	NODULE NUMBER 2	0.00	-0.03	-0.11	0.07	0.03
	NODULE WEIGHT 1	0.00	-0.00	-0.18	0.22	-0.08
	NODULE WEIGHT 2	0.00	0.28+	0.52++	-0.58++	-0.08
	PLANT	0.00	0.18	0.73++	-0.52++	-0.19
	LODGING	0.00	0.00	0.00	0.00	0.00
	SHATTER	1.00	1.00	0.05	-0.28+	0.14
	HARVEST	0.00	0.05	1.00	-0.36++	-0.30+
	PLANTS	0.00	-0.28+	-0.36++	1.00	-0.17
	PODS PER	0.00	0.14	-0.30+	-0.17	1.00
	100 SEED	0.00				
	WEIGHT	0.00				
	QUALITY	0.00				
	OF SEED	0.00				

++ - PROB=.01)

TABLE 76 EXPERIMENT 72 YEAR 1974

REGION - EUROPE
 SITE - MADRID
 LATITUDE - 40 DEG. 30 MIN. N
 DATE PLANTED - MAY 16, 1974
 SOIL TYPE - SAND 30.2%, SILT 48.2%, CLAY 21.6%, PH 8.3
 FERTILIZER USED (KG/HA) - P 120.0, K 120.0
 AMOUNT OF MOISTURE - 550 MM
 NUMBER OF IRRIGATIONS - 11
 SUBSTITUTE VARIETIES - CALLAND (2), BEESON

COUNTRY - SPAIN
 COOPERATOR - J.L. MONTOYA, A. BUENO
 ELEVATION - 600 M
 DATE HARVESTED - OCTOBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	CALLAND (2)	2559.68	52.25	141.00	172.50	297.50	3.49	0.74	70.75	1.00
6	BEESON	2077.92	51.50	140.00	240.00	352.50	4.75	3.23	77.32	1.00
4	CALLAND	1902.88	52.25	142.00	97.50	105.00	1.12	0.33	85.67	1.00
3	WILLIAMS	1833.28	54.75	143.00	112.50	172.50	0.64	0.64	74.87	1.00
2	BONUS	1474.88	58.25	143.00	85.00	60.00	0.54	0.46	76.85	1.00
1	CLARK 63	1321.10	56.50	143.00	192.50	190.00	4.07	0.48	82.62	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		1861.62	54.25	142.00	150.00	196.25	2.44	0.98	78.02	1.00
COEFFICIENT OF VARIATION		249.41	1.40	0.94	39.53	42.40	2.23	1.14	7.71	0.00
5% LSD VARIETY MEANS (*****=NS)		751.82	5.14	1.33	52.71	43.21	183.30	232.64	19.77	0.00
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	-0.40+	-0.28	0.11	0.31	0.04	0.23	-0.01	0.00
DAYS TO FLOWER		-0.40+	1.00	0.41+	0.01	-0.19	-0.01	-0.06	-0.08	0.00
DAYS TO MATURITY		-0.28	0.41+	1.00	-0.12	-0.32	-0.12	-0.16	-0.29	0.00
NODULE NUMBER 1		0.11	0.01	-0.12	1.00	0.52++	0.23	0.28	-0.28	0.00
NODULE NUMBER 2		0.31	-0.19	-0.32	0.52++	1.00	0.23	0.66++	-0.14	0.00
NODULE WEIGHT 1		0.04	-0.01	-0.12	0.28	0.23	1.00	-0.06	0.15	0.00
NODULE WEIGHT 2		0.23	-0.06	-0.16	0.22	0.66++	-0.06	1.00	0.03	0.00
PLANT HEIGHT		-0.01	-0.08	-0.29	-0.28	0.14	0.15	0.03	1.00	0.00
LODGING		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
SHATTER		-0.30	0.37	0.13	-0.49+	-0.43+	-0.15	-0.12	-0.02	0.00
PLANTS HARVEST		0.53++	-0.56++	-0.21	0.18	0.25	0.05	0.11	0.15	0.00
PODS PER PLANT		-0.30	0.30	-0.34	-0.18	-0.08	0.11	-0.12	0.13	0.00
100 SEED WEIGHT		0.53++	-0.47+	-0.46+	-0.17	0.17	-0.07	0.26	0.07	0.00
QUALITY OF SEED		0.32	-0.18	0.17	-0.05	0.02	-0.00	0.30	0.38	0.00

TABLE 76 EXPERIMENT 72 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
5	CALLAND (2)	1.00	183.75	41.30	14.58	2.50	35.1	22.5
6	BEESON	1.00	151.50	37.10	15.00	2.50	33.7	23.4
4	CALLAND	1.00	175.50	40.68	14.53	2.25	34.3	23.4
3	WILLIAMS	1.00	145.25	41.45	13.95	2.25	33.6	22.9
2	BONUS	1.75	120.75	52.58	14.03	2.50	36.4	24.0
1	CLARK 63	1.00	151.25	41.35	11.85	2.50	34.1	23.1
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.13	154.67	42.41	13.99	2.42	34.5	23.2
COEFFICIENT OF VARIATION		0.10	11.22	7.44	0.38	0.30		
5% LSD VARIETY MEANS (*****=NS)		18.14%	14.50%	35.09%	5.38%	24.67%		
		0.31	33.81	*****	1.13	*****		
C O R R E L A T I O N S								
			(+ - PROB=.05			++ - PROB=.01)		
YIELD		KG/HA						
DAYS TO FLOWER		-0.30	0.53++	-0.30	0.53++	0.32		
DAYS TO MATURITY		0.37	-0.56++	0.30	-0.47+	-0.18		
NODULE NUMBER 1		0.13	-0.21	-0.34	-0.46+	0.17		
NODULE NUMBER 2		-0.49+	0.18	-0.18	-0.17	-0.05		
NODULE WEIGHT 1		-0.43+	0.25	-0.08	0.17	0.02		
NODULE WEIGHT 2		-0.15	0.05	0.11	-0.07	-0.00		
PLANT		-0.12	0.11	-0.12	0.26	0.30		
LODGING		-0.02	0.15	0.13	0.07	0.38		
SHATTER		0.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		1.00	-0.54++	0.39	-0.12	-0.06		
PODS PER PLANT		-0.54++	1.00	-0.48+	0.30	0.32		
100 SEED WEIGHT		0.39	-0.48+	1.00	-0.09	-0.53++		
QUALITY OF SEED		-0.12	0.30	-0.09	1.00	0.19		
		-0.06	0.32	-0.53++	0.19	1.00		

TABLE 77 EXPERIMENT 27 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
2	HAMPTON 266A	1.00	228.75	0.00	15.00	0.00
3	HARDEE	1.00	168.75	0.00	8.70	0.00
6	BRAGG	1.00	241.00	0.00	6.70	0.00
10	CLARK 63	1.00	283.75	0.00	9.00	0.00
7	DAVIS	1.00	255.25	0.00	13.80	0.00
4	IMPROVED PELICAN	1.00	237.25	0.00	13.50	0.00
9	HILL	1.00	192.50	0.00	8.30	0.00
8	FORREST	1.00	244.50	0.00	11.00	0.00
12	CALLAND	1.00	256.25	0.00	16.70	0.00
5	BOSSIER	1.00	272.75	0.00	8.40	0.00
13	SEMME	1.00	275.25	0.00	6.70	0.00
1	JUPITER	1.00	247.75	0.00	6.60	0.00
11	WILLIAMS	1.00	216.25	0.00	6.90	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.00	240.00	0.00	10.10	0.00
COEFFICIENT OF VARIATION		0.00	16.12	0.00	0.65	0.00
5% LSD VARIETY MEANS (*****=NS)		0.00%	13.43%	0.00%	12.91%	0.00%
		0.00	46.23	0.00	1.87	0.00
C O R R E L A T I O N S						
			(+ - PROB=.05		+ - - PROB=.01)	
YIELD	KG/HA	0.00	-0.05	0.00	0.08	0.00
DAYS TO FLOWER		0.00	-0.14	0.00	-0.09	0.00
DAYS TO MATURITY		0.00	0.08	0.00	-0.30+	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.00	0.00	0.00	0.00
	LODGING	0.00	0.14	0.00	-0.02	0.00
	SHATTER	1.00	0.00	0.00	-0.17	0.00
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	0.00	0.00	0.14	0.00
100 SEED	WEIGHT	0.00	0.00	1.00	0.00	0.00
QUALITY	OF SEED	0.00	0.14	0.00	1.00	0.00
			0.00	0.00	0.00	1.00

TABLE 78 EXPERIMENT 25 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
9	CLARK 63	1.00	213.25	0.00	0.00	0.00
11	WILLIAMS	1.00	180.25	0.00	0.00	0.00
10	BONUS	1.25	228.50	0.00	0.00	0.00
2	HAMPTON 266A	1.00	173.00	0.00	0.00	0.00
4	BRAGG	1.00	213.00	0.00	0.00	0.00
5	DAVIS	1.00	169.75	0.00	0.00	0.00
12	CALLAND	1.00	208.00	0.00	0.00	0.00
7	FOREST	1.00	135.25	0.00	0.00	0.00
1	JUPITER	1.50	190.00	0.00	0.00	0.00
3	BOSSIER	1.00	195.25	0.00	0.00	0.00
13	SEMME	1.00	204.50	0.00	0.00	0.00
6	TRACY	1.00	175.00	0.00	0.00	0.00
8	HILL	1.00	113.25	0.00	0.00	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.06	184.54	0.00	0.00	0.00
COEFFICIENT OF VARIATION		0.11	8.91	0.00	0.00	0.00
5% LSD VARIETY MEANS (*****=NS)		20.50%	9.66%	0.00%	0.00%	0.00%
		*****	25.57	0.00	0.00	0.00
C O R R E L A T I O N S						
		(+ - PROB=.05		++ - PROB=.01)		
YIELD	KG/HA	-0.02	0.36++	0.00	0.00	0.00
DAYS TO FLOWER		0.28+	-0.20	0.00	0.00	0.00
DAYS TO MATURITY		0.28+	-0.01	0.00	0.00	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.25	0.47++	0.00	0.00	0.00
	LODGING	0.30+	0.19	0.00	0.00	0.00
	SHATTER	1.00	0.04	0.00	0.00	0.00
PLANTS	HARVEST	0.04	1.00	0.00	0.00	0.00
PODS PER	PLANT	0.00	0.00	1.00	0.00	0.00
100 SEED	WEIGHT	0.00	0.00	0.00	1.00	0.00
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00

TABLE 79 EXPERIMENT 9 YEAR 1974

REGION - MESOAMERICA COUNTRY - DOMINICAN REPUBLIC
 SITE - SANTIAGO COOPERATOR - RAMON A. JIMENEZ
 LATITUDE - 19 DEG. 10 MIN. N ELEVATION - 200 M
 DATE PLANTED - APRIL 16, 1974 DATE HARVESTED - JULY, 1974
 SOIL TYPE - SAND 14%, SILT 51%, CLAY 35%, PH 7.2
 AMOUNT OF MOISTURE - 258 MM
 LOCAL VARIETIES - MANDARIN

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
3	HARDEE	2173.35	41.25	162.50	116.25	197.25	0.60	1.01	40.50	1.00
9	FORREST	2030.41	33.00	97.25	136.75	302.75	0.70	1.98	44.00	1.50
5	BOSSIER	2009.99	45.00	143.00	124.50	211.50	0.56	1.23	46.50	1.00
14	CALLAND	2007.07	33.75	93.25	115.75	151.50	0.70	1.28	49.50	1.50
2	HAMPTON 266A	1974.14	33.25	124.00	186.00	195.50	0.60	1.06	36.00	1.00
8	TRACY	1973.73	33.50	91.00	105.75	159.25	0.71	1.47	33.00	1.75
12	BONUS	1925.80	33.75	90.00	123.25	118.50	0.55	0.90	48.25	2.00
4	IMPROVED PELICAN	1909.55	45.00	182.00	76.50	142.50	0.31	0.75	81.75	2.50
1	JUPITER	1857.87	45.00	182.00	93.25	70.50	0.38	0.40	57.50	1.50
11	CLARK 63	1847.45	34.00	90.50	114.75	102.25	0.43	1.13	49.00	2.00
13	WILLIAMS	1771.19	34.25	90.50	173.50	136.50	1.06	1.56	43.00	1.75
10	HILL	1744.93	38.75	97.25	83.00	108.50	0.32	0.99	41.75	1.75
15	MANDARIN	1733.68	36.00	105.00	106.75	156.25	0.68	2.06	56.25	2.75
7	DAVIS	1645.33	38.25	116.00	87.25	155.25	0.41	1.21	37.25	1.25
6	BAGG	1480.30	33.25	116.00	50.75	86.75	0.20	0.51	37.75	1.50
GRAND MEAN										
1872.32										
STANDARD ERROR OF A VARIETY MEAN										
153.80										
COEFFICIENT OF VARIATION										
0.33										
5% LSD VARIETY MEANS (*****=NS)										
16.43%										

C O R R E L A T I O N S										
(+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.05	0.11	0.29+	0.10	0.22	-0.06	0.11	-0.08
DAYS TO FLOWER	0.05	1.00	0.83++	0.21	-0.21	-0.07	-0.25	-0.27+	0.51++	-0.05
DAYS TO MATURITY	0.11	0.83++	1.00	-0.16	0.00	0.00	-0.25	-0.31+	0.50++	-0.13
NODULE NUMBER 1	0.29+	-0.21	-0.21	1.00	0.35++	1.00	0.80++	0.31+	-0.08	-0.09
NODULE NUMBER 2	0.10	-0.07	0.00	0.35++	1.00	0.35++	1.00	0.73++	-0.09	-0.24
NODULE WEIGHT 1	0.22	-0.25	-0.25	0.80++	0.35++	0.35++	1.00	0.49++	-0.06	0.00
NODULE WEIGHT 2	-0.06	-0.27+	-0.31+	0.31+	0.73++	0.73++	0.49++	1.00	-0.06	-0.03
PLANT HEIGHT	0.11	0.51++	0.50++	-0.08	-0.08	-0.09	-0.06	-0.06	1.00	0.43++
LODGING	-0.08	-0.05	-0.13	-0.09	-0.09	-0.24	0.00	-0.03	0.03+	1.00
SHATTER	0.18	0.10	0.15	-0.15	-0.15	0.37++	-0.11	0.13	-0.06	-0.15
HARVEST	-0.15	0.30+	0.26+	-0.05	-0.05	-0.07	-0.02	-0.19	-0.02	-0.19
PLANTS	0.17	-0.05	-0.02	-0.02	-0.02	0.35++	0.04	0.18	-0.00	-0.02
PODS PER	0.17	-0.05	-0.02	-0.02	-0.02	0.35++	0.04	0.18	-0.00	-0.02
100 SEED	0.27+	-0.08	0.07	0.31+	0.31+	-0.19	0.25	-0.16	-0.02	-0.12
QUALITY	0.17	0.51++	0.72++	-0.03	-0.03	0.06	-0.17	-0.30+	0.17	-0.37++

TABLE 79 EXPERIMENT 9 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
3	HARDEE	2.00	177.75	24.95	16.50	5.00
9	FORREST	1.75	163.50	50.12	12.50	3.00
5	BOSSIER	1.00	183.00	29.42	16.00	4.00
14	CALLAND	1.00	177.50	21.65	18.50	3.00
2	HAMPTON 266A	1.25	180.25	29.80	18.75	4.25
8	TRACY	1.00	178.75	28.75	17.25	1.75
12	BONUS	1.00	177.00	25.47	17.00	2.00
4	IMPROVED PELICAN	1.50	181.25	33.25	14.75	4.25
1	JUPITER	1.00	185.50	22.60	19.00	4.25
11	CLARK 63	1.00	159.00	19.72	18.25	1.75
13	WILLIAMS	1.00	167.00	21.98	18.75	2.00
10	HILL	1.75	172.00	30.17	12.75	1.75
15	MANDARIN	1.00	157.25	29.75	14.25	2.50
7	DAVIS	1.75	180.25	33.97	14.00	3.50
6	BRAGG	1.00	179.00	28.72	14.50	3.50
GRAND MEAN						
		1.27	174.60	28.69	16.18	3.10
STANDARD ERROR OF A VARIETY MEAN		0.37	8.07	2.99	0.61	0.35
COEFFICIENT OF VARIATION		57.66%	9.24%	20.82%	7.52%	22.76%
5% LSD VARIETY MEANS (*****=NS)						
		*****	*****	8.52	1.74	1.01
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)						
YIELD	KG/HA	-0.18	-0.15	0.17	0.27+	0.17
DAYS TO FLOWER		0.10	0.30+	-0.05	-0.08	0.51++
DAYS TO MATURITY		0.15	0.26+	-0.02	0.07	0.72++
NODULE NUMBER 1		-0.15	-0.05	-0.02	0.31+	-0.03
NODULE NUMBER 2		0.37++	-0.07	0.35++	-0.19	0.06
NODULE WEIGHT 1		-0.11	-0.02	0.04	0.25	-0.17
NODULE WEIGHT 2		0.13	-0.19	0.18	-0.16	-0.30+
PLANT HEIGHT		-0.06	-0.02	-0.00	-0.02	0.17
LODGING		-0.15	-0.19	-0.02	-0.12	-0.37++
SHATTER		1.00	-0.12	0.26+	-0.27+	0.01
PLANTS HARVEST		-0.12	1.00	-0.17	0.01	0.21
PODS PER PLANT		0.26+	-0.17	1.00	-0.53++	0.08
100 SEED WEIGHT		-0.27+	0.01	-0.53++	1.00	0.07
QUALITY OF SEED		0.01	0.21	0.08	0.07	1.00

TABLE 80

EXPERIMENT 105

YEAR 1974

REGION - MESOAMERICA
 SITE - SANTA CRUZ PORRILLO
 LATITUDE - 14 DEG. N
 DATE PLANTED - JULY 30, 1974
 SOIL TYPE - SAND, PH 6.3
 FERTILIZER USED (KG/HA) - N 9.0, P 26.0
 AMOUNT OF MOISTURE - 807 MM
 LOCAL VARIETIES - LUCERNA, SHI SHI

COUNTRY - EL SALVADOR
 COOPERATOR - R. CRISTALES, R.E. LOPEZ
 ELEVATION - 32 M
 DATE HARVESTED - OCTOBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LOGGING
5	BOSSIER	3324.41	38.75	98.00	345.00	701.75	7.23	12.73	67.50	3.00
6	BRAGG	3051.86	28.50	94.25	315.25	767.50	3.33	6.99	41.25	1.00
13	WILLIAMS	2989.35	25.25	83.00	188.75	360.50	2.73	5.60	68.75	2.00
12	BONUS	2986.85	22.00	80.00	293.75	389.00	3.47	6.38	70.00	2.50
2	HAMPTON 266A	2921.83	29.00	86.00	184.25	410.25	2.09	5.63	50.00	1.00
11	CLARK 63	2797.23	24.75	84.00	191.50	306.75	1.59	6.44	70.00	3.50
7	DAVIS	2641.36	30.50	95.00	289.75	399.25	3.68	5.21	40.00	1.00
3	HARDEE	2640.53	34.25	95.00	183.25	518.75	2.72	6.89	40.00	1.00
10	HILL	2470.49	30.75	81.00	180.00	349.00	2.44	5.10	48.75	1.00
4	IMPROVED PELICAN	2411.32	36.50	91.00	256.25	492.75	1.93	6.87	101.25	4.50
14	LUCERNA	2350.05	44.00	99.00	372.25	594.75	7.31	8.80	113.75	4.25
1	JUPITER	2285.87	37.50	97.25	191.75	446.00	1.43	7.74	75.00	2.00
15	SHI SHI	2213.36	28.75	72.00	268.00	592.25	4.64	9.96	50.75	2.00
8	TRACY	2187.10	26.75	82.50	225.00	401.25	3.26	6.03	50.00	1.00
9	FORREST	1956.22	30.25	84.00	164.00	478.75	1.24	7.05	40.00	1.00
GRAND MEAN		2615.19	31.17	88.13	243.25	480.57	3.27	7.16	61.80	2.05
STANDARD ERROR OF A VARIETY MEAN		226.18	0.44	0.39	32.94	80.32	0.93	1.09	3.18	0.18
COEFFICIENT OF VARIATION		17.30%	2.84%	0.88%	27.09%	33.43%	56.84%	30.32%	10.29%	17.33%
5% LSD VARIETY MEANS (*****= NS)		645.52	1.26	1.11	94.02	229.25	2.65	3.10	9.07	0.51
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.13	1.00							
DAYS TO MATURITY		0.14	0.73++	1.00						
NODULE NUMBER 1		0.13	0.27+	0.29+	1.00					
NODULE NUMBER 2		0.12	0.30+	0.29+	0.54++	1.00				
NODULE WEIGHT 1		0.12	0.31+	0.21	0.53++	0.30+	1.00			
NODULE WEIGHT 2		0.13	0.37++	0.18	0.48++	0.69++	0.35++	1.00		
PLANT HEIGHT		0.12	0.49++	0.28+	0.31+	0.04	0.20	0.25+	1.00	
LOGGING		0.03	0.41++	0.21	0.37++	0.09	0.24	0.29+	0.85++	1.00
SHATTER		-0.19	-0.11	-0.55++	0.08	0.16	0.13	0.28+	-0.13	-0.01
PLANTS HARVEST		0.63++	-0.34++	-0.33++	0.08	-0.06	0.15	0.01	-0.08	-0.02
PODS PER PLANT		-0.23	0.79++	0.52++	0.28+	0.17	0.17	0.30+	0.74++	0.68++
100 SEED WEIGHT		0.29+	-0.66++	-0.48++	-0.18	-0.06	-0.14	-0.09	-0.49++	-0.56++
QUALITY OF SEED		-0.00	-0.46++	-0.24	-0.34++	-0.32+	-0.35++	-0.29+	-0.23	-0.34++

TABLE 80 EXPERIMENT 105 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	BOSSIER	1.00	159.75	54.50	16.93	1.75
6	BAGG	1.00	148.50	31.75	19.88	2.75
13	WILLIAMS	1.00	128.50	32.50	20.83	4.00
12	BONUS	1.00	157.25	35.00	20.00	3.00
2	HAMPTON 266A	1.00	158.00	33.25	21.15	2.75
11	CLARK 63	1.00	140.00	33.75	18.45	3.50
7	DAVIS	1.00	140.25	35.00	19.25	2.25
3	HARDEE	1.00	97.50	44.50	17.85	2.25
10	HILL	1.00	158.75	29.75	19.25	2.75
4	IMPROVED PELICAN	1.00	126.75	85.25	13.75	1.25
14	LUCERNA	1.00	103.50	90.75	15.25	1.25
1	JUPITER	1.00	101.25	68.50	15.75	4.00
15	SHI SHI	3.00	158.00	41.25	19.65	2.00
8	TRACY	1.00	127.00	28.50	20.63	4.25
9	FORREST	1.00	87.75	43.75	17.38	2.75
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		1.13	132.85	45.87	18.40	2.70
COEFFICIENT OF VARIATION		0.00%	9.43	3.75	0.74	0.42
5% LSD VARIETY MEANS (*****=NS)		0.00	14.20%	16.37%	8.01%	30.90%
			26.92	10.71	2.10	1.19
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)						
YIELD	RG/HA	-0.19	0.63++	-0.23	0.29+	-0.00
DAYS TO FLOWER		-0.11	-0.34++	0.79++	-0.66++	-0.46++
DAYS TO MATURITY		-0.55++	-0.33++	0.52++	-0.48++	-0.24
NODULE NUMBER 1		0.08	0.08	0.28+	-0.18	-0.34++
NODULE NUMBER 2		0.16	-0.06	0.17	-0.06	-0.32+
NODULE WEIGHT 1		0.13	0.15	0.17	-0.14	-0.35++
NODULE WEIGHT 2		0.28+	0.01	0.30+	-0.09	-0.29+
PLANT	HEIGHT	-0.13	-0.08	0.74++	-0.49++	-0.23
LODGING		-0.01	-0.02	0.68++	-0.56++	-0.34++
SHATTER		1.00	0.23	-0.06	0.13	-0.16
PLANTS	HARVEST	0.23	1.00	-0.40++	0.40++	-0.06
PODS PER	PLANT	-0.06	-0.40++	1.00	-0.74++	-0.34++
100 SEED	WEIGHT	0.13	0.40++	-0.74++	1.00	0.34++
QUALITY	OF SEED	-0.16	-0.06	-0.34++	0.34++	1.00

TABLE 81

EXPERIMENT 7

YEAR 1974

REGION - MESOAMERICA
 SITE - APATZINGAN
 LATITUDE - 19 DEG. 5 MIN. N
 DATE PLANTED - JULY 18, 1974
 SOIL TYPE - SAND 60%, SILT 8%, CLAY 32%, PH 7.7
 AMOUNT OF MOISTURE - 289 MM
 NUMBER OF IRRIGATIONS - 6
 LOCAL VARIETIES - TROPICANA, CAJEME, JALISCO, TETABIAE

COUNTRY - MEXICO
 COOPERATOR - BENITO CAZARES E.
 ELEVATION - 370 M
 DATE HARVESTED - NOVEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	BOSSIER	3581.97	44.00	91.50	63.50	95.00	1.28	4.40	63.75	1.00		
17	CAJEME	3417.35	38.75	88.00	28.25	28.25	1.03	4.40	45.25	1.00		
1	JUPITER	3238.15	47.00	105.00	164.50	354.75	1.85	6.40	71.25	1.00		
19	TETABIAE	3133.96	35.75	85.00	31.00	45.75	0.90	1.95	39.75	1.00		
14	CALLAND	3096.45	30.00	86.25	120.50	67.25	2.40	3.18	55.75	1.00		
3	HARDEE	2954.76	40.00	96.00	75.25	130.00	1.38	4.18	33.00	1.00		
11	CLARK 63	2763.05	30.00	85.00	110.50	56.25	1.93	2.93	57.75	1.00		
6	BRAEG	2738.05	33.00	88.00	54.25	74.25	1.28	2.23	30.00	1.00		
18	JALISCO	2696.37	35.75	85.00	25.75	15.50	0.65	0.67	42.50	1.00		
2	HAMPTON 266A	2671.37	33.00	88.00	100.50	85.50	1.15	2.43	23.75	1.00		
9	FORREST	2633.86	36.00	87.00	65.25	32.00	0.71	1.35	27.75	1.00		
15	SEMME	2625.52	30.00	88.00	40.50	54.75	0.80	2.03	22.75	1.00		
12	BONUS	2558.84	30.00	85.00	119.00	30.25	2.18	1.00	50.25	1.00		
7	DAVIS	2521.34	36.00	89.50	59.25	67.25	1.25	3.33	31.25	1.00		
16	TROPICANA	2513.00	46.25	94.00	108.50	88.00	2.08	3.28	108.75	2.25		
4	IMPROVED PELICAN	2504.67	44.00	91.00	97.00	112.00	1.38	3.63	94.75	1.00		
13	WILLIAMS	2146.26	30.00	85.00	82.75	47.25	1.43	1.60	48.50	1.00		
10	HILL	2050.41	36.00	88.00	50.00	27.75	0.90	1.23	27.25	1.00		
8	TRACY	1846.20	30.00	85.00	84.75	24.75	2.15	1.10	24.25	1.00		
GRAND MEAN												
2720.61												
STANDARD ERROR OF A VARIETY MEAN												
146.83												
COEFFICIENT OF VARIATION												
10.79%												
5% LSD VARIETY MEANS (*****=NS)												
416.32												
C O R R E L A T I O N S												
(+ - PROB=-.05 +- - PROB=-.01)												
YIELD	KG/HA	1.00	0.30++	0.20	0.00	0.18	-0.09	0.25+	0.24+	0.25+	-0.10	
DAYS TO FLOWER	0.30++	1.00	0.64++	0.20	0.08	0.43++	-0.05	0.53++	0.59++	0.53++	0.30++	
DAYS TO MATURITY	0.20	0.64++	1.00	0.21	0.21	0.53++	0.12	0.56++	0.34++	0.56++	0.19	
NODULE NUMBER 1	0.00	0.08	0.08	0.21	1.00	0.67++	0.75++	0.46++	0.24+	0.46++	0.09	
NODULE NUMBER 2	0.18	0.43++	0.53++	0.53++	0.67++	1.00	0.37++	0.81++	0.24+	0.81++	-0.00	
NODULE WEIGHT 1	-0.09	-0.05	-0.05	0.12	0.75++	0.37++	1.00	0.36++	0.21	0.36++	0.17	
NODULE WEIGHT 2	0.25+	0.53++	0.56++	0.46++	0.46++	0.81++	0.36++	1.00	0.34++	1.00	0.02	
PLANT	0.24+	0.59++	0.34++	0.24+	0.24+	0.24+	0.21	0.34++	1.00	0.57++	0.57++	
LODGING	-0.10	0.30++	0.19	0.09	0.09	-0.00	0.17	0.02	0.26+	0.06	0.60++	
SHATTER	-0.17	-0.04	-0.03	0.03	0.03	-0.02	0.20	0.06	0.35++	0.06	0.23+	
HARVEST	0.56++	0.03	-0.09	0.05	0.05	-0.05	-0.03	-0.07	0.39++	-0.07	-0.49++	
PODS PER PLANT	0.11	0.48++	0.46++	0.05	0.05	0.16	-0.01	0.11	0.23	0.11	-0.61++	
100 SEED WEIGHT	0.12	-0.57++	-0.26+	-0.01	-0.01	-0.08	-0.03	-0.22	-0.21	-0.22	-0.21	
QUALITY OF SEED	-0.27+	-0.25+	-0.06	0.19	0.19	0.02	0.22	-0.08	-0.21	-0.08	-0.21	

TABLE 81 EXPERIMENT 7 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
5	BOSSIER	1.00	146.75	41.72	15.70	1.00	34.3	25.0
17	CAJEME	1.00	117.25	55.60	18.10	1.25	35.2	25.2
1	JUPITER	1.00	121.75	64.65	16.73	2.00	37.7	24.0
19	TETABATE	1.25	165.75	38.60	15.68	1.50	36.4	23.7
14	CALLAND	1.50	135.75	34.20	18.50	2.00	37.7	22.5
3	HARDEE	1.00	114.25	54.87	16.18	2.00	37.3	24.9
11	CLARK 63	1.50	128.50	36.92	16.38	1.75	37.2	24.5
6	BRAAG	1.50	128.75	41.23	16.15	1.00	35.6	24.2
18	JALISCO	1.00	137.50	43.22	16.58	1.75	36.4	23.7
2	HAMPTON 266A	1.25	123.00	48.20	20.25	1.25	36.4	25.6
9	FORREST	1.00	119.00	47.32	14.40	1.25	37.8	22.9
15	SEMME	1.25	138.00	40.47	17.13	1.00	39.1	24.5
12	BONUS	1.25	136.50	39.20	17.75	2.00	38.3	24.5
7	DAVIS	1.25	112.50	48.17	15.23	1.00	36.7	23.0
16	TROPICANA	2.50	147.25	59.47	11.13	1.00	44.0	18.0
4	IMPROVED PELICAN	1.00	124.00	49.82	11.15	1.00	38.4	23.8
13	WILLIAMS	1.25	128.50	35.67	17.10	1.75	39.1	23.6
10	HILL	1.00	103.50	46.05	17.00	2.00	37.8	22.3
8	TRACY	1.50	96.50	43.82	18.20	3.00	39.1	21.5
	GRAND MEAN	1.26	127.63	45.75	16.28	1.55	37.6	23.5
	STANDARD ERROR OF A VARIETY MEAN	0.21	6.89	4.47	0.42	0.16		
	COEFFICIENT OF VARIATION	33.02%	10.80%	19.53%	5.22%	20.26%		
	5% LSD VARIETY MEANS (*****=NS)	0.59	19.55	12.66	1.20	0.45		
C O R R E L A T I O N S (+ - PROB=.05) ++ - PROB=.01)								
	YIELD KG/HA	-0.17	0.56++	0.11	0.12	-0.27+		
	DAYS TO FLOWER	-0.04	0.03	0.48++	-0.57++	-0.25+		
	DAYS TO MATURITY	-0.03	-0.09	0.46++	-0.26+	-0.06		
	NODULE NUMBER 1	0.03	0.05	0.05	-0.01	0.19		
	NODULE NUMBER 2	-0.02	-0.05	0.16	-0.08	0.02		
	NODULE WEIGHT 1	0.20	-0.03	-0.01	-0.03	0.22		
	NODULE WEIGHT 2	0.06	-0.07	0.11	-0.22	-0.08		
	PLANT HEIGHT	0.26+	0.35++	0.23	-0.61++	-0.21		
	LODGING	0.60++	0.23+	0.39++	-0.49++	-0.21		
	SHATTER	1.00	0.06	0.08	-0.22	-0.09		
	PLANTS HARVEST	0.06	1.00	-0.19	-0.09	-0.22		
	PODS PER PLANT	0.08	-0.19	1.00	-0.09	-0.22		
	100 SEED WEIGHT	-0.22	-0.09	-0.22	1.00	0.42++		
	QUALITY OF SEED	-0.09	-0.22	-0.12	0.42++	1.00		

TABLE 82	EXPERIMENT 8	YEAR 1974
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REGION - MESOAMERICA
SITE - UXMAL
LATITUDE - 20 DEG. 25 MIN. N
DATE PLANTED - AUGUST 5, 1974
SOIL PH 7.5
FERTILIZER USED (KG/HA) - P 72.0
AMOUNT OF MOISTURE - 544 MM
LOCAL VARIETIES - UXMAL-4, CIAPY-72

[illegible]

TABLE 82 EXPERIMENT 8 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	BOSSIER	0.00	154.25	39.00	15.88	0.00
15	CIAPY-72	0.00	150.50	54.00	15.38	0.00
14	UXMAL-4	0.00	164.25	46.25	16.38	0.00
1	JUPITER	0.00	154.75	52.50	17.25	0.00
11	CLARK 63	0.00	166.25	24.00	20.00	0.00
9	FORREST	0.00	156.75	36.00	15.38	0.00
4	IMPROVED PELICAN	0.00	151.50	36.75	13.50	0.00
13	WILLIAMS	0.00	160.00	26.00	20.00	0.00
3	HARDEE	0.00	120.25	42.00	18.25	0.00
7	DAVIS	0.00	150.25	26.50	17.50	0.00
6	BRAGG	0.00	157.50	29.00	19.00	0.00
2	HAMPTON 266A	0.00	156.75	29.00	22.13	0.00
12	BONUS	0.00	152.25	22.75	19.63	0.00
8	TRACY	0.00	168.50	22.25	17.38	0.00
10	HILL	0.00	140.00	28.00	15.75	0.00
GRAND MEAN						
STANDARD ERROR OF A VARIETY MEAN		0.00	153.58	34.27	17.56	0.00
COEFFICIENT OF VARIATION		0.00%	9.89	3.04	0.56	0.00
5% LSD VARIETY MEANS (*****=NS)		0.00	12.87%	17.75%	6.36%	0.00%
			*****	8.68	1.59	0.00
C O R R E L A T I O N S						
			(+ - PROB=-.05		+ + - PROB=.01)	
YIELD	KG/HA	0.00	0.19	0.57++	0.01	0.00
DAYS TO FLOWER		0.00	-0.13	0.59++	-0.65++	0.00
DAYS TO MATURITY		0.00	-0.06	0.86++	-0.26+	0.00
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00
PLANT	HEIGHT	0.00	0.18	0.58++	-0.27+	0.00
LODGING		0.00	0.00	0.00	0.00	0.00
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	-0.17	0.06	0.00
PODS PER	PLANT	0.00	-0.17	1.00	-0.26+	0.00
100 SEED	WEIGHT	0.00	0.06	-0.26+	1.00	0.00
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00

TABLE 83

EXPERIMENT 2

YEAR 1974

REGION - MESOAMERICA
 SITE - TOCUMEN
 LATITUDE - 9 DEG. 3 MIN. N
 DATE PLANTED - SEPTEMBER 5, 1974
 SOIL TYPE - SAND 24%, SILT 38%, CLAY 38%, PH 6.3
 AMOUNT OF MOISTURE - 884 MM

COUNTRY - PANAMA
 COOPERATOR - JUAN JOSE FRANCO P.
 ELEVATION - 14 M
 DATE HARVESTED - JANUARY, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
12	BONUS	3677.82	29.75	125.25	274.00	269.00	10.46	10.43	10.43	74.25	1.00
13	WILLIAMS	3410.27	32.00	125.75	297.75	318.25	6.62	7.06	7.06	52.25	1.00
1	JUPITER	3339.83	34.00	123.25	307.50	321.00	8.02	8.54	8.54	74.25	1.00
5	BOSSIER	3258.15	35.75	125.25	313.75	290.75	6.86	6.75	6.75	61.50	1.25
14	CALLAND	3215.23	33.25	124.75	315.00	324.25	5.90	6.11	6.11	51.25	1.25
3	HARDEE	3102.70	31.50	124.50	280.50	287.50	6.11	6.25	6.25	51.50	1.00
6	BRAGG	3101.87	33.25	123.00	296.75	298.25	5.61	5.62	5.62	52.25	1.00
11	CLARK 63	2890.99	32.75	124.00	229.25	240.00	5.28	5.64	5.64	36.50	1.25
4	IMPROVED PELICAN	2863.91	32.75	124.75	291.00	306.75	8.73	9.52	9.52	54.00	2.00
7	DAVIS	2844.32	30.50	129.25	193.75	191.75	5.86	5.31	5.31	56.25	1.00
9	FORREST	2753.05	29.50	122.50	316.50	339.50	7.22	7.66	7.66	51.50	1.00
2	HAMPTON 266A	2340.47	32.50	123.50	230.50	218.50	4.84	4.50	4.50	44.50	1.00
15	SEMME	2317.96	32.00	128.50	182.25	152.75	3.39	2.65	2.65	47.75	1.00
10	HILL	1943.72	30.00	124.50	256.00	272.00	10.40	11.07	11.07	55.25	1.00
8	TRACY	1874.54	34.00	128.00	268.50	247.75	5.45	5.06	5.06	57.25	1.00
GRAND MEAN											
STANDARD ERROR OF A VARIETY MEAN											
COEFFICIENT OF VARIATION											
5% LSD VARIETY MEANS (*****=NS)											
C O R R E L A T I O N S											
(+ - PROB=-.05 ++ - PROB=-.01)											
YIELD	KG/HA	1.00	0.09	-0.19	0.45++	0.43++	0.24	0.24	0.24	0.33++	0.03
DAYS TO FLOWER	1.00	0.09	1.00	-0.01	0.15	-0.01	-0.22	-0.21	-0.21	0.05	0.06
DAYS TO MATURITY	-0.19	-0.01	-0.01	1.00	-0.43++	-0.47++	-0.21	-0.30+	-0.30+	0.04	-0.13
NODULE NUMBER 1	0.45++	0.15	0.15	-0.43++	1.00	0.86++	0.47++	0.46++	0.46++	0.31+	0.16
NODULE NUMBER 2	0.43++	0.01	-0.01	-0.47++	0.86++	1.00	0.47++	0.61++	0.61++	0.22	0.15
NODULE WEIGHT 1	0.24	-0.21	-0.21	-0.21	0.47++	0.47++	1.00	0.94++	0.94++	0.55++	0.15
NODULE WEIGHT 2	0.24	-0.21	-0.21	-0.30+	0.46++	0.61++	0.94++	1.00	1.00	0.48++	0.15
PLANT HEIGHT	0.33++	0.05	0.05	0.04	0.31+	0.22	0.55++	0.48++	0.48++	1.00	-0.06
LOGGING	0.03	0.06	0.06	0.13	0.16	0.15	0.15	0.15	0.15	-0.06	1.00
SHATER	-0.30+	-0.07	-0.07	0.13	-0.38++	-0.31+	-0.15	-0.13	-0.13	-0.18	0.06
PLANTS HARVEST	0.28+	0.20	0.20	0.08	0.26+	0.13	-0.03	-0.06	-0.06	0.01	0.10
PODS PER PLANT	0.58++	0.07	0.07	-0.15	0.41++	0.38++	0.25	0.28+	0.28+	0.15	0.02
100 SEED WEIGHT	0.42++	0.09	0.09	-0.07	0.00	-0.01	-0.25	-0.25	-0.25	0.07	-0.31+
QUALITY OF SEED	-0.24	-0.05	-0.05	0.13	-0.36++	-0.36++	-0.31+	-0.34++	-0.34++	-0.25	-0.13

TABLE 83 EXPERIMENT 2 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
12	BONUS	1.00	200.00	32.75	21.00	3.00	43.8	22.3
13	WILLIAMS	1.00	200.00	28.50	24.53	2.25	42.1	23.5
1	JUPITER	1.00	199.50	29.00	25.00	1.00	43.5	22.9
5	BOSSIER	1.00	200.00	28.25	22.65	2.75	43.2	22.3
14	CALLAND	1.00	200.00	31.75	19.93	1.75	42.6	20.9
3	HARDEE	1.00	199.50	29.50	24.45	2.00	43.7	22.9
6	BRAGG	1.00	200.00	27.25	22.65	3.25	44.9	21.4
11	CLARK 63	1.50	200.00	27.50	22.58	3.00	45.6	21.2
4	IMPROVED PELICAN	1.00	200.00	33.50	13.73	1.50	45.8	21.5
7	DAVIS	1.25	199.50	26.00	21.70	2.25	42.5	22.7
9	FORREST	1.00	199.75	29.25	18.00	2.75	43.7	20.5
2	HAMPTON 266A	1.00	199.50	23.50	22.75	3.50	42.7	23.5
15	SEMME	1.00	199.50	24.25	21.00	3.25	45.2	22.7
10	HILL	1.25	199.00	21.00	19.03	2.25	41.3	21.5
8	TRACY	1.25	200.00	22.50	19.80	2.75	44.9	20.1
	GRAND MEAN	1.08	199.75	27.63	21.25	2.48	43.7	22.0
	STANDARD ERROR OF A VARIETY MEAN	0.13	0.30	1.88	0.92	0.38		
	COEFFICIENT OF VARIATION	23.83%	0.30%	13.60%	8.65%	30.63%		
	5% LSD VARIETY MEANS (*****=NS)	*****	*****	5.36	2.62	1.09		
C O R R E L A T I O N S								
		(+ - PROB=.05	+ - PROB=.01)					
YIELD	KG/HA							
DAYS TO FLOWER		-0.30+	0.28+	0.58++	0.42++	-0.24		
DAYS TO MATURITY		-0.07	0.20	0.07	0.09	-0.05		
NODULE NUMBER 1		0.13	-0.08	-0.15	-0.07	0.13		
NODULE NUMBER 2		-0.38++	0.26+	0.41++	0.00	-0.36++		
NODULE WEIGHT 1		-0.31+	0.13	0.38++	-0.01	-0.36++		
NODULE WEIGHT 2		-0.15	-0.03	0.25	-0.25	-0.31+		
NODULE HEIGHT		-0.13	-0.06	0.28+	-0.25	-0.34++		
PLANT HEIGHT		-0.18	0.01	0.15	0.07	-0.25		
LODGING		0.06	0.10	0.02	-0.31+	-0.13		
SHATTER		1.00	-0.16	-0.28+	-0.07	0.10		
PLANTS HARVEST		-0.16	1.00	0.36++	0.06	0.01		
PODS PER PLANT		-0.28+	0.36++	1.00	-0.15	-0.27+		
100 SEED WEIGHT		-0.07	0.06	-0.15	1.00	0.02		
QUALITY OF SEED		0.10	0.01	-0.27+	0.02	1.00		

TABLE 84

EXPERIMENT 70

YEAR 1974

REGION - MESOAMERICA

SITE - ISABELA

LATITUDE - 18 DEG. 28 MIN. N.

DATE PLANTED - MAY 23, 1974

SOIL TYPE - CLAY, PH 5.3

FERTILIZER USED (KG/HA) - P 30.0

AMOUNT OF MOISTURE - 813 MM

NUMBER OF IRRIGATIONS - 6

COUNTRY - PUERTO RICO

COOPERATOR - FRANK J. JULIA

ELEVATION - 128 M

DATE HARVESTED - SEPTEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
9	FORREST	3671.82	36.00	105.00	88.25	262.50	0.23	1.72	44.25	1.00	
10	HILL	3662.02	36.00	100.75	68.50	183.25	0.22	1.55	41.88	1.25	
7	DAVIS	3649.23	39.50	115.00	111.00	202.00	0.27	1.93	48.13	1.00	
8	TRACY	3570.46	36.00	103.00	160.75	257.25	0.42	3.63	39.00	1.00	
12	BONUS	3526.41	22.00	90.75	144.25	297.75	0.37	3.06	58.88	1.75	
3	HARDEE	3526.08	43.00	149.00	125.75	198.00	0.26	1.56	56.23	1.00	
13	WILLIAMS	3258.40	22.00	89.00	139.25	209.00	0.27	1.91	53.78	1.25	
14	CALLAND	3227.94	22.00	90.75	118.50	212.25	0.26	2.01	61.45	1.25	
2	HAMPTON 266A	2978.60	36.00	129.00	194.75	303.00	0.32	2.35	37.10	1.00	
11	CLARK 63	2916.62	22.00	89.00	136.25	175.25	0.31	2.13	62.65	1.50	
6	BRAGG	2492.41	36.00	127.25	40.00	171.50	0.07	0.98	36.78	1.00	
5	BOSSIER	2445.86	43.00	143.25	129.75	356.50	0.26	2.01	54.33	1.75	
15	SEMMES	2306.71	36.00	120.25	126.50	213.75	0.25	1.79	33.63	1.00	
4	IMPROVED PELICAN	2178.89	50.00	143.00	71.50	189.00	0.17	1.35	130.83	2.50	
1	JUPITER	1480.63	55.00	161.00	97.75	143.25	0.20	1.15	84.95	2.00	
	GRAND MEAN	2992.14	35.63	117.07	116.85	224.95	0.26	1.94	56.25	1.35	
	STANDARD ERROR OF A VARIETY MEAN	261.76	0.52	1.65	19.07	43.05	0.04	0.25	2.50	0.18	
	COEFFICIENT OF VARIATION	17.50%	2.93%	2.81%	32.64%	38.28%	31.99%	25.54%	8.89%	26.37%	
	5% LSD VARIETY MEANS (*****=NS)	747.08	1.49	4.70	54.43	*****	0.12	0.71	7.14	0.52	
C O R R E L A T I O N S											
	YIELD	KG/HA									
	DAYS TO FLOWER	1.00	-0.44++	-0.53++	0.21	0.15	0.23	0.37++	-0.34++	-0.28+	
	DAYS TO MATURITY	-0.44++	1.00	0.90++	-0.25	-0.09	-0.30+	-0.37++	0.38++	0.27+	
	NODULE NUMBER 1	-0.53++	0.90++	1.00	-0.13	-0.02	-0.29+	-0.41++	0.35++	0.26+	
	NODULE NUMBER 2	0.21	-0.25	-0.13	1.00	0.59++	0.76++	0.66++	-0.16	0.02	
	NODULE WEIGHT 1	0.15	-0.09	-0.02	0.59++	1.00	0.44++	0.52++	-0.09	0.15	
	NODULE WEIGHT 2	0.23	-0.30+	-0.29+	0.76++	0.44++	1.00	0.80++	-0.16	0.01	
	PLANT HEIGHT	-0.37++	-0.37++	-0.41++	0.66++	0.52++	0.80++	1.00	-0.21	-0.02	
	LODGING	-0.34++	0.38++	0.35++	-0.16	-0.09	-0.16	-0.21	1.00	0.74++	
	SHATTER	-0.28+	0.27+	0.26+	0.02	0.15	0.01	-0.02	0.74++	1.00	
	PLANTS HARVEST	0.14	0.00	-0.08	-0.27+	-0.13	-0.06	-0.11	-0.06	-0.08	
	PODS PER PLANT	0.24	-0.20	-0.18	-0.02	0.10	0.00	-0.07	0.04	0.08	
	100 SEED WEIGHT	0.20	0.27+	0.07	0.06	0.27+	0.14	0.18	-0.27+	-0.25	
	QUALITY OF SEED	0.04	-0.35++	-0.21	0.52++	0.17	0.45++	0.49++	-0.36++	-0.13	
		-0.28+	0.05	0.18	0.24	0.06	0.11	0.03	-0.22	-0.11	

(+ - PROB=.05 ++ - PROB=.01)

TABLE 84 EXPERIMENT 70 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
9	FORREST	1.00	211.50	41.18	15.78	1.00	38.3	21.8
10	HILL	1.25	275.50	35.83	17.75	1.00	38.2	21.8
7	DAVIS	1.00	214.50	33.18	19.63	1.50	38.5	22.8
8	TRACY	1.00	184.00	40.63	21.48	1.00	41.1	20.8
12	BONUS	1.00	233.75	24.73	21.58	1.75	39.6	22.2
3	HARDEE	1.00	230.00	28.28	18.18	1.00	40.4	21.5
13	WILLIAMS	1.00	212.50	25.10	20.58	1.00	39.4	22.0
14	CALLAND	1.00	235.75	24.60	20.25	1.50	38.8	21.1
2	HAMPTON 266A	1.00	233.00	31.23	22.53	2.50	36.9	23.4
11	CLARK 63	1.00	231.25	23.20	20.48	1.00	38.5	22.4
6	BRAGG	1.00	230.25	26.25	19.55	2.25	39.3	22.3
5	BOSSIER	1.00	234.50	33.43	18.98	1.00	40.6	20.7
15	SEMME	1.00	192.50	36.55	18.73	2.75	39.5	21.7
4	IMPROVED PELICAN	1.00	234.75	27.48	14.85	1.00	41.2	21.0
1	JUPITER	1.00	173.00	29.10	20.78	2.00	43.0	20.4
	GRAND MEAN	1.02	221.78	30.71	19.40	1.48	39.6	21.7
	STANDARD ERROR OF A VARIETY MEAN	0.06	11.88	2.43	0.59	0.36		
	COEFFICIENT OF VARIATION	12.70%	10.72%	15.80%	6.11%	48.20%		
	5% LSD VARIETY MEANS (*****=NS)	*****	33.91	6.92	1.69	1.02		
C O R R E L A T I O N S								
			(+ - PROB=.05	++ - PROB=.01)				
	YIELD KG/HA	0.14	0.24	0.20	0.04	-0.28+		
	DAYS TO FLOWER	0.00	-0.20	0.27+	-0.35++	0.05		
	DAYS TO MATURITY	-0.08	-0.18	0.07	-0.21	0.18		
	NODULE NUMBER 1	-0.27+	-0.02	0.06	0.52++	0.24		
	NODULE NUMBER 2	-0.13	0.10	0.27+	0.17	0.06		
	NODULE HEIGHT 1	-0.06	0.00	0.14	0.45++	0.11		
	NODULE HEIGHT 2	-0.11	-0.07	0.18	0.49++	0.03		
	PLANT	-0.06	0.04	-0.27+	-0.36++	-0.22		
	LODGING	-0.08	0.08	-0.25	-0.13	-0.11		
	SHATTER	1.00	0.26+	0.37++	-0.14	-0.07		
	PLANTS HARVEST	0.26+	1.00	-0.20	-0.21	-0.06		
	PODS PER PLANT	0.37++	-0.20	1.00	-0.20	-0.04		
	100 SEED WEIGHT	-0.14	-0.21	-0.20	1.00	0.24		
	QUALITY OF SEED	-0.07	-0.06	-0.04	0.24	1.00		

TABLE 85

EXPERIMENT 136

YEAR 1974

REGION - MESOAMERICA

SITE - ISABELA

LATITUDE - 18 DEG. 28 MIN. N

DATE PLANTED - FEBRUARY 18, 1975

SOIL TYPE - CLAY, PH 6.0 - 6.5

FERTILIZER USED (KG/HA) - P 87.2

AMOUNT OF MOISTURE - 433 MM

NUMBER OF IRRIGATIONS - 8

COUNTRY - PUERTO RICO

COOPERATOR - R. ABRAMS, F.J. JULIA

ELEVATION - 140 M

DATE HARVESTED - JUNE, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	2559.68	45.00	151.00	164.00	379.00	0.53	1.60	47.50	1.00
3	HARDEE	2173.60	45.00	115.00	157.50	413.50	0.33	2.06	23.00	1.00
9	FORREST	2141.59	45.00	115.00	115.75	372.50	0.22	1.81	25.25	1.00
4	IMPROVED PELICAN	1991.44	45.00	111.00	138.25	304.00	0.35	1.37	47.75	1.25
10	HILL	1818.61	45.00	102.00	179.75	274.25	0.39	1.49	29.75	1.00
7	DAVIS	1807.69	45.00	102.00	182.50	369.75	0.51	2.32	27.75	1.00
14	CALLAND	1613.41	43.00	94.00	130.50	268.00	0.20	1.71	35.25	1.00
13	WILLIAMS	1440.58	43.00	93.00	235.75	266.25	0.23	0.95	28.50	1.00
2	HAMPTON 266A	1392.53	40.00	90.00	278.00	378.50	0.23	1.49	23.50	1.00
5	BOSSIER	1358.27	45.00	102.00	163.50	405.25	0.39	1.57	29.75	1.00
15	SEMMES	1327.18	45.00	102.00	203.00	316.00	0.17	1.16	21.00	1.00
6	BRAGG	1082.80	45.00	102.00	96.00	359.00	0.10	1.46	27.25	1.00
11	CLARK 63	1073.51	40.00	90.00	148.00	223.50	0.13	1.04	31.50	1.50
8	TRACY	861.30	40.00	83.00	196.75	349.25	0.22	1.78	19.50	1.00
12	WAYNE	798.08	40.00	83.00	80.25	146.25	0.07	0.65	27.75	1.75
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		0.54++	0.70++							
DAYS TO MATURITY		0.70++	0.67++							
NODULE NUMBER 1		0.14	0.67++	1.00						
NODULE NUMBER 2		0.44++	-0.12	-0.08						
NODULE WEIGHT 1		0.58++	0.34++	0.27+						
NODULE WEIGHT 2		0.49++	0.41++	0.48++						
PLANT		0.56++	0.24	0.21						
LODGING		-0.17	-0.40++	-0.06						
SHATTER		-0.06	0.10	-0.25						
HARVEST		0.18	0.00	-0.09						
PLANTS		0.53++	0.11	0.33++						
PODS PER		0.05	0.25	0.00						
100 SEED		-0.16	-0.28+	0.12						
QUALITY		-0.11	0.01	-0.05						
OF SEED		-0.11	-0.05	-0.05						
PLANTS		0.58++	0.44++	0.58++						
PODS PER		0.41++	0.34++	0.41++						
100 SEED		0.21	0.27+	0.41++						
QUALITY		0.40++	1.00	0.40++						
OF SEED		0.44++	0.40++	0.44++						
PLANTS		0.43++	0.07	0.43++						
PODS PER		0.12	0.07	0.43++						
100 SEED		0.20	-0.40++	-0.19						
QUALITY		0.20	-0.20	-0.11						
OF SEED		0.15	0.09	0.25						
PLANTS		-0.04	0.09	0.48++						
PODS PER		0.09	0.18	0.48++						
100 SEED		0.16	0.06	-0.17						
QUALITY		-0.05	-0.06	-0.23						
OF SEED		-0.33++	-0.06	-0.23						

TABLE 85 EXPERIMENT 136 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.00	134.50	66.00	19.63	2.25	39.5	26.3
3	HARDEE	1.00	115.00	22.10	20.68	2.00	43.9	23.8
9	FORREST	1.00	107.75	18.30	20.08	2.50	43.7	23.8
4	IMPROVED PELICAN	1.00	97.25	21.38	18.53	1.75	43.9	24.3
10	HILL	1.00	140.00	19.60	19.18	1.75	43.1	22.7
7	DAVIS	1.00	110.75	26.40	21.55	2.25	43.4	23.7
14	CALLAND	1.00	104.25	24.25	21.73	3.00	43.3	23.4
13	WILLIAMS	1.00	143.00	24.65	23.83	2.00	44.3	23.4
2	HAMPTON 266A	1.00	132.00	20.65	21.93	2.25	43.1	24.0
5	BOSSIER	1.00	138.50	24.40	21.05	1.50	45.5	23.5
15	SEMMES	1.25	110.00	21.65	22.28	3.75	46.8	22.4
6	BRAGG	1.00	115.50	17.00	21.77	2.75	43.8	23.8
11	CLARK 63	1.00	131.50	17.18	21.35	2.00	44.9	22.9
8	TRACY	1.00	103.25	18.83	20.50	2.75	44.4	21.5
12	WAYNE	1.00	107.25	19.10	21.15	2.00	45.4	21.7
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.02	119.37	24.10	21.01	2.30	43.9	23.4
COEFFICIENT OF VARIATION		0.06	4.87	2.90	0.99	0.33		
5% LSD VARIETY MEANS (*****=NS)		12.70%	8.16%	24.03%	9.43%	28.30%		
		*****	13.90	8.26	*****	0.93		
C O R R E L A T I O N S								
			(+ - PROB=.05		++ - PROB=.01)			
YIELD	KG/HA	-0.06	0.18	0.53++	0.05	-0.11		
DAYS TO FLOWER		0.10	0.00	0.25	-0.16	0.01		
DAYS TO MATURITY		-0.00	0.11	0.73++	-0.28+	-0.05		
NODULE NUMBER 1		-0.09	0.33++	0.00	0.12	-0.05		
NODULE NUMBER 2		-0.20	0.09	0.18	0.06	-0.06		
NODULE WEIGHT 1		-0.11	0.25	0.48++	-0.17	-0.23		
NODULE WEIGHT 2		-0.21	-0.12	0.10	0.08	-0.06		
PLANT HEIGHT		-0.15	0.09	0.52++	-0.16	-0.33+		
LODGING		-0.04	-0.12	-0.16	-0.05	-0.12		
SHATTER		1.00	-0.04	0.03	0.05	0.28+		
PLANTS HARVEST		-0.04	1.00	0.23	0.21	-0.28+		
PODS PER PLANT		0.03	0.23	1.00	0.01	-0.11		
100 SEED WEIGHT		0.05	0.21	0.01	1.00	0.15		
QUALITY OF SEED		0.28+	-0.28+	-0.11	0.15	1.00		

TABLE 86

EXPERIMENT 71

YEAR 1974

REGION - MESOAMERICA
 SITE - LAJAS
 LATITUDE - 18 DEG. N
 DATE PLANTED - OCTOBER 25, 1974
 SOIL TYPE - CLAY
 FERTILIZER USED (KG/HA) - P 22.9
 AMOUNT OF MOISTURE - 562 MM
 NUMBER OF IRRIGATIONS - 5
 SUBSTITUTE VARIETY - KANRICH

COUNTRY - PUERTO RICO
 COOPERATOR - AGRIC. EXPT. STATION, UPR
 ELEVATION - 30 M
 DATE HARVESTED - JANUARY, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	BOSSLER	2644.03	34.50	92.25	116.25	179.00	0.96	3.03	48.50	1.00
7	DAVIS	2488.29	30.75	93.50	81.50	93.50	0.56	1.89	34.50	1.00
14	CALLAND	2462.16	27.00	89.75	67.75	103.25	0.28	1.89	54.25	1.00
1	JUPITER	2461.20	33.75	96.00	105.25	150.00	0.71	2.55	67.00	2.25
4	IMPROVED PELICAN	2263.66	32.25	86.00	61.25	113.50	0.41	1.68	60.50	1.25
6	BRAGG	2157.31	27.00	86.00	78.25	177.00	0.45	2.38	37.50	1.00
3	HARDEE	2141.97	30.75	93.50	98.50	157.00	0.62	2.43	25.75	1.00
15	KANRICH	2120.09	28.00	86.00	76.50	157.00	0.38	2.71	51.00	1.00
11	CLARK 63	2102.80	26.50	87.25	94.25	127.25	0.27	2.24	50.25	2.00
12	BONUS	2060.62	28.00	86.00	107.00	109.25	0.48	1.66	50.50	1.00
9	FORREST	1902.42	28.50	86.00	69.00	142.75	0.28	2.36	30.75	1.00
2	HAMPTON 266A	1694.76	26.50	87.25	143.00	166.00	0.34	1.92	31.50	1.00
13	WILLIAMS	1636.45	27.50	85.25	118.25	130.00	0.34	2.09	41.75	1.00
10	HILL	1513.97	30.75	81.00	56.00	94.25	0.39	1.96	31.25	1.00
8	TRACY	1465.33	26.50	79.00	96.50	118.25	0.44	2.76	28.50	1.00
GRAND MEAN		2074.34	29.22	87.65	91.28	134.53	0.46	2.24	42.90	1.17
STANDARD ERROR OF A VARIETY MEAN		67.33	0.38	0.93	11.70	19.25	0.07	0.28	1.20	0.13
COEFFICIENT OF VARIATION		6.49%	2.64%	2.13%	25.64%	28.62%	29.69%	24.81%	5.60%	22.52%
5% LSD VARIETY MEANS (*****=NS)		192.16	1.10	2.66	33.40	54.94	0.20	0.79	3.43	0.37
C O R R E L A T I O N S										
(* - PROB=.05 ** - PROB=.01)										
YIELD	KG/HA	1.00	0.52++	0.76++	0.04	0.17	0.51++	0.17	0.57++	0.24
DAYS TO FLOWER	1.00	0.52++	1.00	0.48++	0.02	0.15	0.71++	0.30+	0.31+	0.19
DAYS TO MATURITY	0.76++	0.48++	1.00	1.00	0.21	0.19	0.46++	0.09	0.31+	0.30+
NODULE NUMBER 1	0.04	0.02	0.21	1.00	0.49++	1.00	0.46++	0.31+	-0.01	0.07
NODULE NUMBER 2	0.17	0.15	0.19	0.49++	0.46++	0.45++	0.45++	0.73++	-0.01	0.05
NODULE WEIGHT 1	0.51++	0.71++	0.46++	0.46++	0.31+	0.73++	1.00	0.54++	0.16	0.04
NODULE WEIGHT 2	0.17	0.30+	0.09	0.09	0.31+	-0.01	0.54++	1.00	-0.02	0.09
PLANT	HEIGHT	0.57++	0.31+	0.31+	-0.01	0.05	0.16	-0.02	1.00	0.50++
LODGING	0.24	0.19	0.30+	0.00	0.07	0.00	0.04	0.09	0.50++	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST	0.39++	0.31+	0.23	0.23	0.04	0.04	0.27+	0.05	0.43++	0.17
PODS PER PLANT	0.21	0.28+	0.23	0.23	-0.09	0.14	0.08	-0.02	-0.06	0.07
100 SEED WEIGHT	0.24	-0.25	0.19	0.19	0.05	0.14	-0.08	0.17	0.30+	0.00
QUALITY OF SEED	-0.04	0.02	-0.11	-0.11	-0.01	0.12	0.06	0.14	-0.40++	-0.18

TABLE 86 EXPERIMENT 71 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
5	BOSSIER	1.00	214.50	21.28	16.68	5.00
7	DAVIS	1.00	204.50	24.18	17.20	5.00
14	CALLAND	1.00	197.50	18.88	21.60	3.00
1	JUPITER	1.00	215.25	23.98	18.52	3.00
4	IMPROVED PELICAN	1.00	199.75	32.63	14.38	5.00
6	BRAGG	1.00	204.75	23.68	18.28	4.00
3	HARDEE	1.00	179.25	29.55	17.80	5.00
15	KANRICH	1.00	217.00	18.83	24.33	5.00
11	CLARK 63	1.00	208.00	20.10	18.03	5.00
12	BONUS	1.00	209.75	22.88	17.55	4.00
9	FORREST	1.00	178.00	31.65	15.48	5.00
2	HAMPTON 266A	1.00	200.75	21.20	16.45	5.00
13	WILLIAMS	1.00	181.75	17.08	19.50	3.00
10	HILL	1.00	219.25	19.45	14.75	4.00
8	TRACY	1.00	169.75	20.68	16.75	5.00
GRAND MEAN						
		1.00	199.98	23.07	17.82	4.40
STANDARD ERROR OF A VARIETY MEAN						
		0.00	6.89	1.32	0.30	0.00
COEFFICIENT OF VARIATION						
		0.00%	6.89%	11.43%	3.42%	0.00%
5% LSD VARIETY MEANS (*****=NS)						
		0.00	19.67	3.76	0.87	0.00
C O R R E L A T I O N S						
			(+ - PROB=.05	++ - PROB=.01)		
YIELD	KG/HA	0.00	0.39++	0.21	0.24	-0.04
DAYS TO	FLOWER	0.00	0.31+	0.28+	-0.25	0.02
DAYS TO	MATURITY	0.00	0.23	0.23	0.19	-0.11
NODULE	NUMBER 1	0.00	0.04	-0.09	0.05	-0.01
NODULE	NUMBER 2	0.00	0.04	0.14	0.14	0.12
NODULE	WEIGHT 1	0.00	0.27+	0.08	-0.08	0.06
NODULE	WEIGHT 2	0.00	0.05	-0.02	0.17	0.14
PLANT	HEIGHT	0.00	0.43++	-0.06	0.30+	-0.40++
LODGING		0.00	0.17	0.07	0.00	-0.18
SHATTER		1.00	0.00	0.00	0.00	0.00
PLANTS	HARVEST	0.00	1.00	-0.23	0.10	-0.10
PODS PER	PLANT	0.00	-0.23	1.00	-0.47++	0.35++
100 SEED	WEIGHT	0.00	0.10	-0.47++	1.00	-0.31+
QUALITY	OF SEED	0.00	-0.10	0.35++	-0.31+	1.00

TABLE 87

EXPERIMENT 135

YEAR 1974

REGION - MESOAMERICA
 SITE - MAYAGUEZ
 LATITUDE - 18 DEG. N
 DATE PLANTED - DECEMBER 30, 1974
 SOIL TYPE - CLAY
 FERTILIZER USED (KG/HA) - P 27.0, K 114.0
 AMOUNT OF MOISTURE - 569 MM
 NUMBER OF IRRIGATIONS - 12 (305 MM)

COUNTRY - PUERTO RICO
 COOPERATOR - ERIC G. STONE
 ELEVATION - 30 M
 DATE HARVESTED - APRIL, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	MODULE NUMBER 1	MODULE NUMBER 2	MODULE WEIGHT 1	MODULE WEIGHT 2	PLANT HEIGHT	LOGGING
1	JUPITER	1067.71	68.00	137.00	0.00	271.50	0.00	1.37	50.50	1.25
4	IMPROVED PELICAN	1033.54	62.00	110.00	0.00	115.75	0.00	0.78	38.25	1.00
5	BOSSIER	964.36	56.00	113.00	0.00	198.00	0.00	1.13	27.25	1.00
10	HILL	840.58	58.00	106.25	0.00	54.75	0.00	0.42	26.00	1.00
3	HARDEE	809.33	56.00	109.00	0.00	142.50	0.00	0.90	19.25	1.00
7	DAVIS	715.98	62.00	113.00	0.00	176.25	0.00	1.12	22.25	1.00
2	HAMPTON 266A	635.96	34.00	102.00	0.00	84.00	0.00	0.60	19.00	1.00
14	CALLAND	496.35	49.00	106.25	0.00	58.25	0.00	0.44	23.75	1.00
11	CLARK 63	490.51	49.00	107.50	0.00	42.25	0.00	0.30	20.75	1.00
15	SEMME	436.75	49.00	106.50	0.00	90.75	0.00	0.31	16.50	1.00
6	BRAGG	418.83	49.00	103.50	0.00	72.75	0.00	0.65	21.25	1.00
13	WILLIAMS	417.17	49.00	100.50	0.00	53.75	0.00	0.30	16.75	1.00
12	WAYNE	357.99	49.00	99.00	0.00	22.00	0.00	0.11	19.25	1.00
9	FORREST	349.65	56.00	108.50	0.00	46.50	0.00	0.22	22.75	1.00
8	TRACY	342.57	49.00	99.00	0.00	39.50	0.00	0.29	13.75	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		625.15	53.00	108.07	0.00	97.90	0.00	0.60	23.82	1.02
COEFFICIENT OF VARIATION		134.52	0.00	1.37	0.00	25.51	0.00	0.20	2.94	0.06
5% LSD VARIETY MEANS (*****=NS)		43.04%	0.00%	2.54%	0.00%	52.11%	0.00%	68.23%	24.67%	12.70%
		383.93	0.00	3.91	0.00	72.81	0.00	0.58	8.38	*****
C O R R E L A T I O N S										
(+ - PROB=-.05 ++ - PROB=-.01)										
YIELD	KG/HA	1.00	0.41++	0.56++	0.00	0.60++	0.00	0.72++	0.77++	0.03
DAYS TO FLOWER	0.41++	1.00	0.70++	0.70++	0.00	0.48++	0.00	0.39++	0.59++	0.25
DAYS TO MATURITY	0.56++	0.70++	1.00	1.00	0.00	0.71++	0.00	0.58++	0.77++	0.41++
NODULE NUMBER 1	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2	0.60++	0.48++	0.71++	0.71++	0.00	1.00	0.00	0.88++	0.61++	0.16
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.72++	0.39++	0.58++	0.58++	0.00	0.88++	0.00	1.00	0.61++	0.07
PLANT	0.77++	0.59++	0.77++	0.77++	0.00	0.61++	0.00	0.61++	1.00	0.23
LODGING	0.03	0.25	0.41++	0.41++	0.00	0.16	0.00	0.07	0.23	1.00
SHATTER	-0.02	0.13	0.30+	0.30+	0.00	0.10	0.00	0.03	0.15	0.70++
HARVEST	0.12	0.02	0.04	0.04	0.00	0.03	0.00	-0.01	0.10	0.14
PODS PER PLANT	0.76++	0.38++	0.36++	0.36++	0.00	0.40++	0.00	0.49++	0.54++	0.06
100 SEED WEIGHT	0.24	-0.29+	0.19	0.19	0.00	0.22	0.00	0.23	0.19	0.09
QUALITY OF SEED	-0.02	-0.00	0.25	0.25	0.00	0.04	0.00	0.05	0.18	0.22

TABLE 87 EXPERIMENT 135 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.25	124.25	12.38	18.18	3.00	39.7	26.1
4	IMPROVED PELICAN	1.00	105.75	22.05	13.93	2.00	43.7	23.5
5	BOSSIER	1.00	109.00	15.85	17.20	2.00	42.0	24.9
10	HILL	1.00	145.50	15.33	14.00	2.00	37.0	25.3
3	HARDEE	1.00	99.75	16.38	15.35	2.25	41.3	24.8
7	DAVIS	1.00	102.75	16.18	14.10	1.75	38.7	26.1
2	HAMPTON 266A	1.00	122.50	10.95	17.65	2.25	40.4	24.2
14	CALLAND	1.25	108.50	9.37	18.55	3.00	40.4	23.3
11	CLARK 63	1.00	108.75	10.70	15.18	2.00	40.2	24.6
15	SEMME	1.00	102.50	9.50	15.85	2.00	41.6	23.5
6	BRAGG	1.00	85.00	9.37	17.55	2.25	40.3	24.0
13	WILLIAMS	1.00	131.00	6.65	17.60	2.25	43.2	23.7
12	WAYNE	1.00	111.50	8.20	15.65	2.50	41.0	23.6
9	FORREST	1.00	91.25	12.83	12.75	2.00	41.4	24.5
8	TRACY	1.00	101.50	8.60	15.80	2.25	42.9	21.9
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION 17.88%								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=-.05 +- - PROB=-.01)								
YIELD	KG/HA	-0.02	0.12	0.76++	0.24	-0.02		
DAYS TO FLOWER		0.13	0.02	0.38++	-0.29+	-0.00		
DAYS TO MATURITY		0.30+	0.04	0.36++	0.19	0.25		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.10	0.03	0.40++	0.22	0.04		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.03	-0.01	0.49++	0.23	0.05		
PLANT	HEIGHT	0.15	0.10	0.54++	0.19	0.18		
LODGING		0.70++	0.14	0.06	0.22	0.22		
SHATTER		1.00	0.14	-0.01	0.19	0.31+		
PLANTS HARVEST		0.14	1.00	-0.04	0.06	0.05		
PODS PER PLANT		-0.01	-0.04	1.00	-0.02	-0.23		
100 SEED WEIGHT		0.19	0.06	-0.02	1.00	0.41++		
QUALITY OF SEED		0.31+	0.05	-0.23	0.41++	1.00		
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION 17.88%								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=-.05 +- - PROB=-.01)								
YIELD	KG/HA	-0.02	0.12	0.76++	0.24	-0.02		
DAYS TO FLOWER		0.13	0.02	0.38++	-0.29+	-0.00		
DAYS TO MATURITY		0.30+	0.04	0.36++	0.19	0.25		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.10	0.03	0.40++	0.22	0.04		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.03	-0.01	0.49++	0.23	0.05		
PLANT	HEIGHT	0.15	0.10	0.54++	0.19	0.18		
LODGING		0.70++	0.14	0.06	0.22	0.22		
SHATTER		1.00	0.14	-0.01	0.19	0.31+		
PLANTS HARVEST		0.14	1.00	-0.04	0.06	0.05		
PODS PER PLANT		-0.01	-0.04	1.00	-0.02	-0.23		
100 SEED WEIGHT		0.19	0.06	-0.02	1.00	0.41++		
QUALITY OF SEED		0.31+	0.05	-0.23	0.41++	1.00		
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION 17.88%								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=-.05 +- - PROB=-.01)								
YIELD	KG/HA	-0.02	0.12	0.76++	0.24	-0.02		
DAYS TO FLOWER		0.13	0.02	0.38++	-0.29+	-0.00		
DAYS TO MATURITY		0.30+	0.04	0.36++	0.19	0.25		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.10	0.03	0.40++	0.22	0.04		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.03	-0.01	0.49++	0.23	0.05		
PLANT	HEIGHT	0.15	0.10	0.54++	0.19	0.18		
LODGING		0.70++	0.14	0.06	0.22	0.22		
SHATTER		1.00	0.14	-0.01	0.19	0.31+		
PLANTS HARVEST		0.14	1.00	-0.04	0.06	0.05		
PODS PER PLANT		-0.01	-0.04	1.00	-0.02	-0.23		
100 SEED WEIGHT		0.19	0.06	-0.02	1.00	0.41++		
QUALITY OF SEED		0.31+	0.05	-0.23	0.41++	1.00		

TABLE 88

EXPERIMENT 69

YEAR 1974

REGION - MESOAMERICA
 SITE - PORT OF SPAIN
 LATITUDE - 11 DEG. N
 DATE PLANTED - JUNE 21, 1974
 SOIL TYPE - SANDY LOAM
 FERTILIZER USED (KG/HA) - N 40.0, P 80.0, K 80.0
 AMOUNT OF MOISTURE - 682 MM
 NUMBER OF IRRIGATIONS - 2 (25 MM)
 SUBSTITUTE VARIETIES - JUPITER (CADP), IMPROVED PELICAN (CADP)

COUNTRY - TRINIDAD AND TOBAGO
 COOPERATOR - L. BEDNARZ
 ELEVATION - 6 M
 DATE HARVESTED - OCTOBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	3957.04	38.00	119.00	0.00	0.00	0.00	0.00	85.30	3.00
14	JUPITER (CADP)	3792.42	47.50	119.50	0.00	0.00	0.00	0.00	86.62	3.00
3	HARDEE	3598.64	33.50	119.00	0.00	0.00	0.00	0.00	54.23	2.75
4	IMPROVED PELICAN	3388.18	38.50	112.50	0.00	0.00	0.00	0.00	116.05	4.50
5	BOSSIER	3294.41	38.00	119.00	0.00	0.00	0.00	0.00	63.03	4.00
13	WILLIAMS	3023.52	23.75	95.00	0.00	0.00	0.00	0.00	65.82	3.25
7	DAVIS	2979.76	31.00	118.50	0.00	0.00	0.00	0.00	52.03	2.50
15	IMPROVED PELICAN (CADP)	2796.39	38.00	116.50	0.00	0.00	0.00	0.00	118.90	4.50
2	HAMPTON 266A	2660.95	26.25	119.00	0.00	0.00	0.00	0.00	35.88	2.50
12	BONUS	2542.17	22.75	102.50	0.00	0.00	0.00	0.00	61.10	2.50
11	CLARK 63	2152.51	23.75	102.50	0.00	0.00	0.00	0.00	64.55	3.25
6	BRAGG	2019.99	26.25	119.25	0.00	0.00	0.00	0.00	40.40	1.75
8	TRACY	1898.30	25.50	106.25	0.00	0.00	0.00	0.00	43.33	3.50
10	HILL	1302.76	31.50	114.50	0.00	0.00	0.00	0.00	43.95	3.00
9	FORREST	1139.81	27.00	119.00	0.00	0.00	0.00	0.00	42.30	2.25
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2703.12	31.42	113.47	0.00	0.00	0.00	0.00	64.90	3.08
COEFFICIENT OF VARIATION		262.97	0.86	2.05	0.00	0.00	0.00	0.00	3.52	0.28
5% LSD VARIETY MEANS (*****NS)		19.46%	5.45%	3.61%	0.00%	0.00%	0.00%	0.00%	10.86%	18.07%
		750.52	2.44	5.84	0.00	0.00	0.00	0.00	10.06	0.79
CORRELATIONS										
		(+ - PROB=.05 ++ - PROB=.01)								
YIELD	KG/HA	1.00	0.52++	0.10	0.00	0.00	0.00	0.00	0.50++	0.16
DAYS TO FLOWER		0.52++	1.00	0.51++	0.00	0.00	0.00	0.00	0.61++	0.39++
DAYS TO MATURITY		0.10	0.51++	1.00	0.00	0.00	0.00	0.00	0.02	-0.07
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.50++	0.61++	0.00	0.00	0.00	0.00	0.00	1.00	0.00
LODGING		0.16	0.39++	-0.07	0.00	0.00	0.00	0.00	0.64++	1.00
SHATTER		-0.21	-0.08	0.47++	0.00	0.00	0.00	0.00	-0.38++	-0.30+
HARVEST		-0.34++	-0.66++	-0.38++	0.00	0.00	0.00	0.00	-0.56++	-0.29+
PODS PER PLANT		0.55++	0.74++	0.25	0.00	0.00	0.00	0.00	0.75++	0.39++
100 SEED WEIGHT		0.38++	-0.10	-0.15	0.00	0.00	0.00	0.00	-0.23	-0.29+
QUALITY OF SEED		-0.63++	-0.52++	0.17	0.00	0.00	0.00	0.00	-0.62++	-0.33++

TABLE 88 EXPERIMENT 69 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.00	142.25	53.68	21.85	2.00	42.5	25.8
14	JUPITER (CADD)	1.00	116.50	83.20	21.52	2.00	42.0	26.3
3	HARDEE	3.00	178.75	35.03	20.43	3.75	44.5	26.0
4	IMPROVED PELICAN	2.00	178.00	71.20	17.23	2.25	45.4	24.0
5	BOSSIER	1.50	190.50	37.28	19.48	3.75	45.3	24.9
13	WILLIAMS	1.00	212.00	26.75	22.63	3.00	45.1	23.8
7	DAVIS	2.75	198.75	24.43	20.60	4.50	43.7	26.5
15	IMPROVED PELICAN (CADD)	1.50	125.00	69.23	16.53	3.25	43.7	25.6
2	HAMPTON 266A	3.25	204.50	27.78	21.43	4.50	42.2	27.2
12	BONUS	1.00	205.00	29.00	21.30	4.00	46.1	23.2
11	CLARK 63	1.25	201.75	22.25	18.95	3.75	43.7	25.5
6	BRAGG	2.75	196.75	26.18	21.63	4.75	44.3	25.2
8	TRACY	1.00	193.75	22.15	20.53	4.00	46.8	23.1
10	HILL	2.75	215.00	20.35	17.60	4.75	43.9	29.1
9	FORREST	2.25	192.75	30.45	16.23	5.00	43.7	28.5
GRAND MEAN								
		1.87	183.42	38.59	19.86	3.68	44.2	25.6
STANDARD ERROR OF A VARIETY MEAN		0.28	10.97	5.03	0.76	0.34		
COEFFICIENT OF VARIATION		29.54%	11.96%	26.09%	7.62%	18.67%		
5% LSD VARIETY MEANS (*****=NS)		0.79	31.30	14.37	2.16	0.98		
C O R R E L A T I O N S								
				(+ - PROB=-.05		++ - PROB=-.01)		
YIELD	KG/HA	-0.21	-0.34++	0.55++	0.38++	-0.63++		
DAYS TO FLOWER		-0.08	-0.66++	0.74++	-0.10	-0.52++		
DAYS TO MATURITY		0.47++	-0.38++	0.25	-0.15	0.17		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT		0.00	0.00	0.00	0.00	0.00		
HEIGHT		-0.38++	-0.56++	0.75++	-0.23	-0.62++		
LODGING		-0.30+	-0.29+	0.39++	-0.29+	-0.33++		
SHATTER		1.00	0.24	-0.28+	-0.11	0.45++		
PLANTS HARVEST		0.24	1.00	-0.71++	0.03	0.48++		
PODS PER PLANT		-0.28+	-0.71++	1.00	-0.10	-0.63++		
100 SEED WEIGHT		-0.11	0.03	-0.10	1.00	-0.18		
QUALITY OF SEED		0.45++	0.48++	-0.63++	-0.18	1.00		

TABLE	89	EXPERIMENT	87	YEAR	1974
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REGION - MESOAMERICA
SITE - PORT OF SPAIN
LATITUDE - 11 DEG. N
DATE PLANTED - DECEMBER 3, 1974
SOIL TYPE - SANDY LOAM
FERTILIZER USED (KG/HA) - N 40.0, P 80.0, K 80.0
AMOUNT OF MOISTURE - 209 MM
NUMBER OF IRRIGATIONS - 3 (45 MM)
SUBSTITUTE VARIETIES - JUPITER (CADP), IMPROVED PELICAN (CADP)

TABLE 89 EXPERIMENT 87 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.00	187.00	30.00	22.55	2.00	40.3	25.8
14	JUPITER (CADD)	1.00	179.00	40.00	23.05	1.25	39.6	26.3
7	DAVIS	4.50	191.00	25.50	21.05	2.50	43.0	23.2
4	IMPROVED PELICAN	1.00	181.50	37.50	16.50	2.00	44.6	22.2
15	IMPROVED PELICAN (CADD)	1.00	182.75	45.00	16.55	1.75	45.4	21.1
5	BOSSIER	2.50	196.25	31.50	20.18	5.00	43.7	23.1
11	CLARK 63	1.00	190.00	24.75	19.43	3.50	42.4	24.0
6	BRAGG	1.50	184.75	23.75	22.85	4.75	43.3	23.9
2	HAMPTON 266A	2.25	190.25	23.25	24.25	4.25	40.5	28.0
13	WILLIAMS	1.00	161.25	25.50	21.25	3.25	42.6	23.3
12	BONUS	4.75	173.50	26.75	19.73	4.50	44.4	22.7
9	FORREST	1.00	115.25	33.75	18.95	4.75	43.3	24.0
10	HILL	3.50	187.50	24.00	18.75	2.50	42.0	22.8
8	TRACY	3.00	171.25	22.75	20.75	2.00	44.4	22.0
3	HARDEE	2.00	27.00	47.50	24.73	3.50	45.4	22.1
	GRAND MEAN	2.07	167.88	30.77	20.70	3.17	43.0	23.6
	STANDARD ERROR OF A VARIETY MEAN	0.39	6.49	2.79	0.35	0.25		
	COEFFICIENT OF VARIATION	37.90%	7.73%	18.15%	3.34%	15.49%		
	5% LSD VARIETY MEANS (*****=NS)	1.12	18.53	7.97	0.99	0.70		
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)								
	YIELD KG/HA	-0.25	0.64++	-0.02	-0.10	-0.14		
	DAYS TO FLOWER	-0.30+	-0.13	0.66++	-0.00	-0.47++		
	DAYS TO MATURITY	-0.02	-0.31+	0.19	0.43+	0.48++		
	NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00		
	NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00		
	PLANT	-0.44++	0.35++	0.31+	-0.13	-0.44++		
	LODGING	-0.31+	0.27+	0.19	0.00	-0.21		
	SHATTER	1.00	0.07	-0.24	0.01	0.09		
	PLANTS HARVEST	0.07	1.00	-0.48++	-0.30+	-0.15		
	PODS PER PLANT	-0.24	-0.48++	1.00	-0.11	-0.24		
	100 SEED WEIGHT	0.01	-0.30+	-0.11	1.00	0.19		
	QUALITY OF SEED	0.09	-0.15	-0.24	0.19	1.00		

TABLE 90

EXPERIMENT 37

YEAR 1974

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
5	CALLAND	1.00	156.00	59.00	19.73	0.00	38.4	20.2
3	BONUS	1.00	140.75	61.50	19.30	0.00	41.6	20.2
2	CLARK 63	1.00	127.75	65.00	19.18	0.00	41.7	19.3
4	WILLIAMS	1.00	130.25	54.25	20.23	0.00	39.6	19.8
1	HILL	1.00	84.00	115.75	12.13	0.00	36.3	16.9
	GRAND MEAN	1.00	127.75	71.10	18.11	0.00	39.5	19.3
	STANDARD ERROR OF A VARIETY MEAN	0.00	5.18	4.92	0.35	0.00		
	COEFFICIENT OF VARIATION	0.00%	8.11%	13.84%	3.91%	0.00%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	15.97	15.17	1.09	0.00		
C O R R E L A T I O N S								
			(+ - PROB=.05		++ - PROB=.01)			
	YIELD	0.00	0.87++	-0.91++	0.94++	0.00		
	DAYS TO	0.00	-0.91++	0.93++	-0.96++	0.00		
	FLOWER	0.00	-0.85++	0.93++	-0.97++	0.00		
	DAYS TO	0.00	-0.42	0.36	-0.43	0.00		
	MATURITY	0.00	-0.85++	0.90++	-0.92++	0.00		
	NODULE	0.00	-0.43	0.45+	-0.51+	0.00		
	NUMBER 1	0.00	-0.84++	0.91++	-0.91++	0.00		
	NODULE	0.00	0.35	-0.57++	0.62++	0.00		
	WEIGHT 1	0.00	-0.25	0.56++	-0.58++	0.00		
	NODULE	0.00	0.00	0.00	0.00	0.00		
	WEIGHT 2	0.00	1.00	-0.84++	0.85++	0.00		
	PLANT	0.00	-0.84++	1.00	-0.95++	0.00		
	LODGING	0.00	0.85++	-0.95++	1.00	0.00		
	HEIGHT	0.00	0.00	0.00	0.00	1.00		
	SHATTER	1.00	0.00	0.00	0.00	0.00		
	PLANTS	0.00	0.00	0.00	0.00	0.00		
	HARVEST	0.00	0.00	0.00	0.00	0.00		
	PODS PER	0.00	0.00	0.00	0.00	0.00		
	PLANT	0.00	0.00	0.00	0.00	0.00		
	100 SEED	0.00	0.00	0.00	0.00	0.00		
	WEIGHT	0.00	0.00	0.00	0.00	0.00		
	QUALITY	0.00	0.00	0.00	0.00	1.00		
	OF SEED							

TABLE 91 EXPERIMENT 3 YEAR 1974

REGION - MIDDLE EAST
 SITE - BET DAGAN
 LATITUDE - 32 DEG. N
 DATE PLANTED - APRIL 21, 1974
 SOIL TYPE - SAND 40%, SILT 26%, CLAY 35%, PH 7.6
 FERTILIZER USED (KG/HA) - N 154.0, P 53.0, K 104.0
 AMOUNT OF MOISTURE - 450 MM
 NUMBER OF IRRIGATIONS - 8

COUNTRY - ISRAEL
 COOPERATOR - B. RETIG
 ELEVATION - 80 M
 DATE HARVESTED - SEPTEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
13	CALLAND	3159.80	37.00	122.00	0.00	0.00	0.00	0.00	127.50	3.75
12	WILLIAMS	3113.12	37.00	120.00	0.00	0.00	0.00	0.00	115.50	2.50
11	BONUS	2899.33	39.00	127.00	0.00	0.00	0.00	0.00	132.00	5.00
10	CLARK 63	2467.58	38.00	123.00	0.00	0.00	0.00	0.00	128.00	3.50
9	HILL	2112.09	77.00	144.00	0.00	0.00	0.00	0.00	135.50	3.00
8	FORREST	1993.32	73.00	145.50	0.00	0.00	0.00	0.00	138.50	3.00
7	TRACY	1942.05	59.00	149.25	0.00	0.00	0.00	0.00	152.50	3.75
6	DAVIS	1019.37	90.00	152.00	0.00	0.00	0.00	0.00	163.00	5.00
2	HARDEE	888.51	108.00	179.00	0.00	0.00	0.00	0.00	154.00	3.75
14	SEMME	823.08	88.00	164.00	0.00	0.00	0.00	0.00	122.25	3.75
1	HAMPTON 266A	775.15	84.00	175.00	0.00	0.00	0.00	0.00	179.00	4.25
5	BRAGG	717.23	77.00	163.50	0.00	0.00	0.00	0.00	166.50	3.00
3	IMPROVED PELICAN	586.37	111.25	182.00	0.00	0.00	0.00	0.00	146.00	4.00
4	BOSSIER	519.69	81.00	164.00	0.00	0.00	0.00	0.00	137.75	4.50
	GRAND MEAN	1644.05	71.38	150.73	0.00	0.00	0.00	0.00	142.71	3.77
	STANDARD ERROR OF A VARIETY MEAN	150.25	2.07	0.49	0.00	0.00	0.00	0.00	6.85	0.30
	COEFFICIENT OF VARIATION	18.28%	5.80%	0.65%	0.00%	0.00%	0.00%	0.00%	9.59%	15.73%
	5% LSD VARIETY MEANS (*****=NS)	429.81	5.93	1.40	0.00	0.00	0.00	0.00	19.58	0.85

(+ - PROB=.05 ++ - PROB=.01)

CORRELATIONS

YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	PLANT HEIGHT	LODGING
1.00	-0.85++	-0.90++	0.00	0.00	-0.47++	-0.22
-0.85++	1.00	0.93++	0.00	0.00	0.44++	0.18
-0.90++	0.93++	1.00	0.00	0.00	0.53++	0.18
0.00	0.00	0.00	1.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
-0.47++	0.44++	0.53++	0.00	0.00	1.00	0.00
-0.22	0.18	0.18	0.00	0.00	0.00	0.26
0.00	0.00	0.00	0.00	0.00	0.26	1.00
0.05	-0.16	-0.13	0.00	0.00	0.00	0.00
0.12	0.08	-0.06	0.00	0.00	-0.28+	0.12
0.63++	-0.68++	-0.55++	0.00	0.00	-0.10	-0.08
0.15	-0.06	-0.05	0.00	0.00	-0.19	0.08
			0.00	0.00	0.11	0.15

TABLE 91 EXPERIMENT 3 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
13	CALLAND	1.00	152.75	55.00	19.65	2.50	37.5	22.2
12	WILLIAMS	1.00	141.00	50.00	17.08	1.00	36.1	23.7
11	BONUS	1.00	131.75	64.00	17.78	2.00	37.3	23.9
10	CLARK 63	1.00	124.75	53.00	15.98	1.00	35.8	23.4
9	HILL	1.00	97.75	92.50	11.68	1.50	36.8	20.6
8	FORREST	1.00	94.00	94.00	10.80	2.00	36.7	20.6
7	TRACY	1.00	109.50	79.75	14.60	1.25	39.6	19.8
6	DAVIS	1.00	120.00	63.00	11.35	1.50	39.4	19.6
2	HARDEE	1.00	116.50	69.25	14.55	1.00	40.7	21.3
14	SEMME	1.00	135.25	63.75	11.93	1.25	39.4	21.6
1	HAMPTON 266A	1.00	109.50	38.25	16.38	2.00	39.4	20.7
5	BAGG	1.00	137.50	46.50	12.58	1.50	40.1	20.1
3	IMPROVED PELICAN	1.00	137.00	56.50	10.70	2.00	40.1	21.1
4	BOSSIER	1.00	137.50	64.50	12.93	1.25	41.4	19.6
	GRAND MEAN	1.00	124.63	63.57	14.14	1.55	38.6	21.3
	STANDARD ERROR OF A VARIETY MEAN	0.00	9.82	10.06	0.45	0.18		
	COEFFICIENT OF VARIATION	0.00%	15.76%	31.65%	6.41%	22.84%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	28.08	28.78	1.30	0.51		
C O R R E L A T I O N S								
		(+ - PROB=.05	++ - PROB=.01)					
YIELD	KG/HA	0.00	0.05	0.12	0.63++	0.15		
DAYS TO FLOWER		0.00	-0.16	0.08	-0.68++	-0.06		
DAYS TO MATURITY		0.00	-0.13	-0.06	-0.55++	-0.05		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT HEIGHT		0.00	-0.28+	-0.08	-0.19	0.11		
LODGING		0.00	0.12	-0.10	0.08	0.15		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	-0.36++	0.31+	0.10		
PODS PER PLANT		0.00	-0.36++	1.00	-0.31+	0.08		
100 SEED WEIGHT		0.00	0.31+	-0.31+	1.00	0.15		
QUALITY OF SEED		0.00	0.10	0.08	0.15	1.00		

TABLE 92 EXPERIMENT 11 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED
8	FORREST	0.00	57.25	11.62	0.00	2.25
7	TRACY	0.00	50.75	15.18	0.00	2.50
9	HILL	0.00	48.25	10.10	0.00	1.75
6	DAVIS	0.00	58.75	10.38	0.00	2.00
5	BAGG	0.00	52.00	11.62	0.00	1.50
4	BOSSIER	0.00	51.50	10.62	0.00	1.00
14	SEMME	0.00	59.00	9.00	0.00	2.00
1	HAMPTON 266A	0.00	53.00	8.75	0.00	1.50
10	CLARK 63	0.00	61.75	7.65	0.00	3.00
12	WILLIAMS	0.00	57.00	7.75	0.00	2.25
13	CALLAND	0.00	61.25	6.90	0.00	4.00
11	BONUS	0.00	54.25	6.18	0.00	2.75
2	HARDEE	0.00	50.50	8.40	0.00	1.75
3	IMPROVED PELICAN	0.00	51.50	9.72	0.00	2.25
GRAND MEAN						
			54.77	9.56	0.00	2.18
STANDARD ERROR OF A VARIETY MEAN			3.22	0.90	0.00	0.32
COEFFICIENT OF VARIATION			11.78%	18.91%	0.00%	29.66%
5% LSD VARIETY MEANS (*****=NS)			*****	2.58	0.00	0.92
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)						
YIELD KG/HA						
DAYS TO FLOWER			-0.02	0.46++	0.00	-0.14
DAYS TO MATURITY			-0.37++	0.38++	0.00	-0.53++
NODULE NUMBER 1			-0.35++	0.43++	0.00	-0.59++
NODULE NUMBER 2			0.00	0.00	0.00	0.00
NODULE WEIGHT 1			0.00	0.00	0.00	0.00
NODULE WEIGHT 2			0.00	0.00	0.00	0.00
PLANT HEIGHT			0.00	0.00	0.00	0.00
LODGING			-0.25	0.28+	0.00	-0.19
SHATTER			0.00	0.00	0.00	0.00
PLANTS HARVEST			0.00	0.00	0.00	0.00
PODS PER PLANT			1.00	-0.20	0.00	0.38++
100 SEED WEIGHT			-0.20	1.00	0.00	-0.38++
QUALITY OF SEED			0.00	0.00	1.00	0.00
			0.38++	-0.38++	0.00	1.00

TABLE 93 EXPERIMENT 55 YEAR 1974

REGION - MIDDLE EAST COUNTRY - LEBANON
 SITE - BEQA'A COOPERATOR - S. ABU-SHAKRA
 LATITUDE - 33 DEG. 55 MIN. N ELEVATION - 995 M
 DATE PLANTED - APRIL 26, 1974 DATE HARVESTED - OCTOBER, 1974
 SOIL TYPE - CLAY, PH 8.0
 FERTILIZER USED (KG/HA) - N 120.0, P 200.0
 AMOUNT OF MOISTURE - 960 MM
 NUMBER OF IRRIGATIONS - 24

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
4	BONUS	770.99	62.75	143.50	122.50	156.25	1.27	1.82	137.53	3.50
5	WILLIAMS	695.14	62.00	142.50	156.25	184.75	1.05	1.70	123.40	2.50
6	CALLAND	602.62	61.25	140.75	116.50	148.50	1.17	1.72	126.48	4.75
2	TRACY	410.58	89.00	190.00	202.00	285.00	1.85	3.22	143.65	3.75
3	CLARK 63	352.57	64.75	144.50	173.50	169.25	1.17	1.50	130.15	4.50
1	BRAGG	336.48	98.00	184.00	200.50	130.75	1.36	0.94	153.93	4.75
7	SEMMES	180.20	107.00	184.00	167.25	108.50	1.15	0.97	125.78	3.50
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00	-0.61++	-0.52++	-0.20	0.02	-0.00	0.09	0.01	-0.25
DAYS TO FLOWER		-0.61++	1.00	0.93++	0.38+	-0.11	0.20	-0.17	0.23	0.06
DAYS TO MATURITY		-0.52++	0.93++	1.00	0.43+	0.12	0.32	0.07	0.37	0.08
NODULE NUMBER 1		-0.20	0.38+	0.43+	1.00	0.41+	0.80++	0.31	0.25	-0.03
NODULE NUMBER 2		0.02	-0.11	0.12	0.41+	1.00	0.49++	0.91++	0.18	-0.10
NODULE WEIGHT 1		-0.00	0.20	0.32	0.80++	0.49++	1.00	0.55++	0.42+	0.04
NODULE WEIGHT 2		0.09	-0.17	0.07	0.31	0.91++	0.55++	1.00	0.12	-0.14
PLANT HEIGHT		0.01	0.23	0.37	0.25	0.18	0.42+	1.00	0.12	0.23
LODGING		-0.25	0.06	0.08	-0.03	-0.10	0.04	-0.14	0.23	1.00
SHATTER		0.39+	-0.71++	-0.66++	-0.44+	-0.01	-0.06	0.19	-0.19	-0.00
PLANTS HARVEST		0.41+	-0.61++	-0.74++	-0.30	-0.20	-0.26	-0.18	-0.31	0.02
PODS PER PLANT		0.16	0.32	0.46+	0.36	0.20	0.44+	0.21	0.21	-0.18
100 SEED WEIGHT		0.64++	-0.79++	-0.79++	-0.38+	-0.06	-0.19	0.04	-0.34	-0.05
QUALITY OF SEED		-0.41+	0.77++	0.94++	0.42+	0.35	0.42+	0.35	0.35	0.04

TABLE 93 EXPERIMENT 55 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
4	BONUS	2.25	161.25	18.05	12.98	2.00	40.0	20.7
5	WILLIAMS	2.50	144.75	18.78	14.12	2.00	38.4	21.3
6	CALLAND	3.50	164.25	14.35	16.87	2.00	37.7	21.6
2	TRACY	1.75	96.00	27.10	10.21	4.00	40.8	15.1
3	CLARK 63	1.75	152.25	15.63	11.95	2.00	37.0	22.5
1	BRAGG	1.00	126.00	19.13	10.12	3.00	39.5	19.3
7	SENNES	1.00	115.00	18.90	9.39	3.00	40.9	18.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.96	137.07	18.85	12.23	2.57	39.2	19.9
COEFFICIENT OF VARIATION		0.29	10.42	2.47	0.50	0.00		
5% LSD VARIETY MEANS (*****=NS)		29.74%	15.20%	26.21%	8.11%	0.00%		
		0.87	30.96	7.34	1.47	0.00		
C O R R E L A T I O N S								
		(+ - PROB=.05			++ - PROB=.01)			
YIELD		0.39+	0.41+	0.16	0.64++	-0.41+		
KG/HA								
DAYS TO FLOWER		-0.71++	-0.61++	0.32	-0.79++	0.77++		
DAYS TO MATURITY		-0.66++	-0.74++	0.46+	-0.79++	0.94++		
NODULE NUMBER 1		-0.44+	-0.30	0.36	-0.38+	0.42+		
NODULE NUMBER 2		-0.01	-0.20	0.20	-0.06	0.35		
NODULE WEIGHT 1		-0.06	-0.26	0.44+	-0.19	0.42+		
NODULE WEIGHT 2		0.19	-0.18	0.21	0.04	0.35		
PLANT		-0.19	-0.31	0.21	-0.34	0.35		
HEIGHT		-0.00	0.02	-0.18	-0.05	0.04		
LODGING								
SHATTER		1.00	0.42+	-0.30	0.77++	-0.49++		
PLANTS HARVEST		0.42+	1.00	-0.58++	0.63++	-0.76++		
PODS PER PLANT		-0.30	-0.58++	1.00	-0.29	0.55++		
100 SEED WEIGHT		0.77++	0.63++	-0.29	1.00	-0.68++		
QUALITY OF SEED		-0.49++	-0.76++	0.55++	-0.68++	1.00		

TABLE 94 EXPERIMENT 85 YEAR 1974

REGION - MIDDLE EAST
 SITE - RIYADH
 LATITUDE - 24 DEG. 25 MIN. N
 DATE PLANTED - MAY 19, 1975
 SOIL TYPE - SAND 50%, SILT 26%, CLAY 24%, PH 7.4
 FERTILIZER USED (KG/HA) - N 150.0, P 30.0, K 45.0
 NUMBER OF IRRIGATIONS - 27

COUNTRY - SAUDI ARABIA
 COOPERATOR - M.Z. JUWANA
 ELEVATION - 579 M
 DATE HARVESTED - SEPTEMBER, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	1211.08	101.00	196.00	0.00	0.00	0.00	0.00	109.75	2.25
2	HAMPTON 266A	1077.72	63.00	168.50	0.00	0.00	0.00	0.00	38.75	1.00
5	BOSSIER	1075.21	62.25	169.75	0.00	0.00	0.00	0.00	30.25	1.00
7	DAVIS	1022.70	51.00	148.50	0.00	0.00	0.00	0.00	32.25	1.00
11	CLARK 63	921.43	30.25	121.50	0.00	0.00	0.00	0.00	42.50	1.00
9	FORREST	890.59	42.00	151.75	0.00	0.00	0.00	0.00	25.75	1.00
13	WILLIAMS	843.09	30.00	110.25	0.00	0.00	0.00	0.00	39.25	1.00
3	HARDEE	758.90	83.00	172.25	0.00	0.00	0.00	0.00	61.75	1.25
12	BONUS	686.39	27.00	100.75	0.00	0.00	0.00	0.00	33.00	1.00
6	BRAGG	673.47	61.25	161.25	0.00	0.00	0.00	0.00	45.75	1.00
15	SEMMEs	670.13	56.50	166.00	0.00	0.00	0.00	0.00	30.00	1.00
8	TRACY	652.21	47.50	153.50	0.00	0.00	0.00	0.00	28.50	1.00
10	HILL	649.30	42.75	132.50	0.00	0.00	0.00	0.00	22.50	1.00
14	CALLAND	608.87	28.25	123.50	0.00	0.00	0.00	0.00	37.25	1.00
4	IMPROVED PELICAN	592.62	83.00	167.00	0.00	0.00	0.00	0.00	106.50	3.50
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	0.24	0.22	0.00	0.00	0.00	0.00	0.18	0.00
DAYS TO FLOWER		0.24	1.00	0.90++	0.00	0.00	0.00	0.00	0.73++	0.61++
DAYS TO MATURITY		0.22	0.90++	1.00	0.00	0.00	0.00	0.00	0.49++	0.39++
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HEIGHT		0.18	0.73++	0.49++	0.00	0.00	0.00	0.00	1.00	0.84++
LODGING		0.00	0.61++	0.39++	0.00	0.00	0.00	0.00	0.14	0.34++
SHATTER		-0.30+	0.07	0.04	0.00	0.00	0.00	0.00	0.07	0.07
PLANTS HARVEST		0.37++	-0.11	-0.11	0.00	0.00	0.00	0.00	-0.26+	-0.33+
PODS PER PLANT		0.17	0.53++	0.56++	0.00	0.00	0.00	0.00	-0.30+	-0.20
100 SEED WEIGHT		0.56++	-0.27+	-0.24	0.00	0.00	0.00	0.00		
QUALITY OF SEED		-0.25	-0.61++	-0.60++	0.00	0.00	0.00	0.00		

TABLE 94 EXPERIMENT 85 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	2.25	199.50	32.20	12.66	1.00	42.9	20.4
2	HAMPTON 266A	2.50	206.75	31.03	12.34	2.00	39.4	23.3
5	BOSSIER	2.25	230.75	23.45	12.86	1.25	44.8	20.6
7	DAVIS	3.00	196.00	26.20	12.54	3.50	42.9	19.6
11	CLARK 63	2.25	209.25	17.58	12.04	2.00	43.5	20.3
9	FORBEST	2.75	157.25	30.10	11.09	2.50	41.8	20.5
13	WILLIAMS	2.50	178.00	18.45	11.21	2.00	43.6	20.8
3	HARDEE	3.00	112.00	42.40	9.48	2.00	44.7	18.2
12	BONUS	2.25	175.00	15.93	13.06	2.50	41.5	21.7
6	BRAGG	2.00	172.00	35.10	8.15	2.00	42.6	22.0
15	SEMMES	2.75	112.25	38.05	9.96	2.75	43.2	21.3
8	TRACY	3.00	172.00	26.40	10.44	2.50	38.5	20.9
10	HILL	3.50	186.50	18.35	10.19	3.25		
14	CALLAND	3.25	207.00	13.78	13.01	3.25		
4	IMPROVED PELICAN	4.00	179.25	25.88	7.33	2.25		
	GRAND MEAN	2.75	179.57	26.32	11.09	2.27	42.5	
	STANDARD ERROR OF A VARIETY MEAN	0.25	16.44	4.28	0.75	0.21		
	COEFFICIENT OF VARIATION	18.50%	18.31%	32.50%	13.51%	18.10%		
	5% LSD VARIETY MEANS (*****=NS)	0.73	46.93	12.21	2.14	0.59		
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)								
YIELD	KG/HA	-0.30+	0.37++	0.17	0.56++	-0.25		
DAYS TO FLOWER		0.07	-0.11	0.53++	-0.27+	-0.61++		
DAYS TO MATURITY		0.04	-0.11	0.56++	-0.24	-0.60++		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT	HEIGHT	0.14	0.07	0.19	-0.26+	-0.30+		
LODGING		0.34++	0.07	0.08	-0.33+	-0.20		
SHATTER		1.00	-0.14	0.06	-0.32+	0.16		
PLANTS	HARVEST	-0.14	1.00	-0.43++	0.32+	0.03		
PODS PER PLANT		0.06	-0.43++	1.00	-0.24	-0.34++		
100 SEED WEIGHT		-0.32+	0.32+	-0.24	1.00	0.01		
QUALITY OF SEED		0.16	0.03	-0.34++	0.01	1.00		

TABLE 95 EXPERIMENT 32 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
11	CLARK 63	1.00	186.75	31.30	20.25	1.25	47.4	21.1
1	JUPITER	1.50	181.25	30.20	17.50	1.00	44.7	22.1
14	CALLAND	2.25	177.50	29.20	17.50	1.25	45.9	21.2
13	WILLIAMS	2.00	186.50	27.60	17.25	1.25	43.1	23.0
7	DAVIS	1.00	188.25	21.08	13.25	1.25	45.1	20.6
5	BOSSIER	1.50	188.75	22.83	20.25	1.25	47.1	21.5
2	HAMPTON 266A	1.00	186.00	22.95	19.00	1.25	45.3	21.4
12	BONUS	1.00	171.00	24.42	13.75	1.75	46.4	20.7
6	BRAGG	2.00	183.75	22.50	14.50	3.00	43.8	23.3
4	IMPROVED PELICAN	1.00	178.25	19.35	13.00	1.00	44.5	23.0
8	TRACY	1.75	187.75	19.88	15.00	2.00	44.0	21.2
15	SENNES	1.00	184.00	17.50	15.50	1.25	44.6	21.5
9	FORREST	2.25	170.00	19.85	17.00	1.25	48.3	18.8
10	HILL	2.00	176.00	17.92	15.25	1.50	45.3	22.1
3	HARDEE	1.25	168.50	12.58	15.75	1.00	47.3	21.6
	GRAND MEAN	1.50	180.95	22.61	16.32	1.42	45.5	21.5
	STANDARD ERROR OF A VARIETY MEAN	0.22	2.95	1.23	0.59	0.28		
	COEFFICIENT OF VARIATION	29.34%	3.27%	10.86%	7.27%	39.52%		
	5% LSD VARIETY MEANS (*****=NS)	0.63	8.43	3.50	1.69	0.80		
C O R R E L A T I O N S								
	YFLD KG/HA	-0.08	0.25	0.75++	0.36++	-0.05		
	DAYS TO FLOWER	-0.01	0.15	0.28+	0.12	-0.39++		
	DAYS TO MATURITY	-0.06	0.02	0.08	0.04	-0.03		
	NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00		
	NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00		
	PLANT HEIGHT	-0.02	0.21	0.43++	0.09	-0.09		
	LODGING	0.00	0.00	0.00	0.00	0.00		
	SHATTER	1.00	-0.12	0.03	0.16	0.18		
	PLANTS HARVEST	-0.12	1.00	0.23	0.19	0.06		
	PODS PER PLANT	0.03	0.23	1.00	0.38++	-0.07		
	100 SEED WEIGHT	0.16	0.19	0.38++	1.00	-0.18		
	QUALITY OF SEED	0.18	0.06	-0.07	-0.18	1.00		

TABLE 96

EXPERIMENT 51

YEAR 1974

REGION - SOUTH AMERICA
 SITE - ABAPO - IZOZOG
 LATITUDE - 18 DEG. 30 MIN. S
 DATE PLANTED - JUNE 21, 1974
 SOIL TYPE - SILT, PH 7.0
 AMOUNT OF MOISTURE - 966 MM
 NUMBER OF IRRIGATIONS - 6 (937 MM)
 LOCAL VARIETIES - PELICANO

COUNTRY - BOLIVIA
 COOPERATOR - H. CERVANTES RAMIREZ
 ELEVATION - 389 M
 DATE HARVESTED - OCTOBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	2186.27	51.75	115.00	0.00	0.00	0.00	0.00	49.00	2.00
15	PELICANO	2140.43	50.75	118.75	0.00	0.00	0.00	0.00	47.75	2.00
12	WILLIAMS	1902.88	41.00	97.25	0.00	0.00	0.00	0.00	26.50	2.00
13	CALLAND	1895.80	39.75	118.00	0.00	0.00	0.00	0.00	27.00	2.00
5	BOSSIER	1662.00	47.50	100.75	0.00	0.00	0.00	0.00	36.50	1.00
4	IMPROVED PELICAN	1277.76	49.25	119.25	0.00	0.00	0.00	0.00	28.25	2.00
7	DAVIS	1093.97	50.00	115.25	0.00	0.00	0.00	0.00	30.50	1.00
10	HILL	1036.87	50.25	119.75	0.00	0.00	0.00	0.00	27.25	1.00
9	FORREST	943.94	51.00	119.00	0.00	0.00	0.00	0.00	32.50	1.00
3	HARDEE	926.02	49.75	118.75	0.00	0.00	0.00	0.00	27.50	1.00
11	CLARK 63	848.50	41.50	115.00	0.00	0.00	0.00	0.00	26.00	2.00
8	TRACY	498.02	40.75	97.25	0.00	0.00	0.00	0.00	21.50	1.00
14	SEMMES	377.16	40.00	115.00	0.00	0.00	0.00	0.00	28.75	1.25
2	HAMPTON 266A	287.56	40.00	110.75	0.00	0.00	0.00	0.00	28.00	1.00
6	BRAGG	268.39	43.25	122.75	0.00	0.00	0.00	0.00	27.75	1.25
GRAND MEAN		1156.37	45.77	113.50	0.00	0.00	0.00	0.00	30.98	1.45
STANDARD ERROR OF A VARIETY MEAN		89.59	1.16	1.26	0.00	0.00	0.00	0.00	1.43	0.11
COEFFICIENT OF VARIATION		15.50%	5.08%	2.23%	0.00%	0.00%	0.00%	0.00%	9.25%	15.30%
5% LSD VARIETY MEANS (*****=NS)		255.71	3.32	3.61	0.00	0.00	0.00	0.00	4.09	0.32
C O R R E L A T I O N S										
			(+ - PROB=.05		+ + - PROB=.01)					
YIELD	KG/HA	1.00	0.35++	-0.10	0.00	0.00	0.00	0.00	0.60++	0.58++
DAYS TO FLOWER		0.35++	1.00	0.36++	0.00	0.00	0.00	0.00	0.51++	-0.04
DAYS TO MATURITY		-0.10	0.36++	1.00	0.00	0.00	0.00	0.00	0.15	0.12
NODULE NUMBER 1		0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 2		0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT		0.60++	0.51++	0.15	0.00	0.00	0.00	0.00	0.00	0.00
LODGING		0.58++	-0.04	0.12	0.00	0.00	0.00	0.00	1.00	0.26+
SHATTER		-0.54++	-0.27+	0.27+	0.00	0.00	0.00	0.00	-0.28+	-0.29+
HARVEST		0.72++	0.44++	0.04	0.00	0.00	0.00	0.00	0.37++	0.37++
PODS PER PLANT		0.84++	0.42++	0.09	0.00	0.00	0.00	0.00	0.74++	0.65++
100 SEED WEIGHT		-0.03	0.05	-0.02	0.00	0.00	0.00	0.00	-0.15	-0.27+
QUALITY OF SEED		-0.35++	-0.33+	0.18	0.00	0.00	0.00	0.00	-0.33++	-0.29+

TABLE 96 EXPERIMENT 51 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.25	189.00	34.17	22.25	1.75	43.1	20.9
15	PELICANO	1.00	176.25	38.42	15.25	1.75	44.9	19.9
12	WILLIAMS	1.00	149.00	19.17	21.00	2.00	43.9	21.6
13	CALLAND	1.50	165.00	22.10	21.75	3.00	43.5	20.7
5	BOSSIER	1.50	171.75	18.22	19.50	1.75	44.9	20.2
4	IMPROVED PELICAN	1.50	157.25	25.15	17.50	2.00	47.4	21.3
7	DAVIS	1.50	148.25	10.88	24.50	2.75	46.1	19.3
10	HILL	1.75	150.50	15.78	19.00	2.25	44.1	18.3
9	FORREST	1.50	158.25	13.13	21.25	2.00	43.5	19.6
3	HARDEE	2.00	160.75	11.85	24.25	2.75	45.8	19.9
11	CLARK 63	1.75	152.75	14.30	19.50	2.25	44.3	21.8
8	TRACY	1.50	145.00	11.10	20.00	2.25	46.4	16.0
14	SEMMES	2.00	155.00	8.75	18.75	2.50	46.7	20.4
2	HAMPTON 266A	1.75	135.25	7.00	20.50	2.75	44.3	21.2
6	BRAGG	2.00	127.75	6.97	19.25	2.75	45.4	20.2
	GRAND MEAN	1.57	156.12	17.13	20.28	2.30	45.0	20.1
	STANDARD ERROR OF A VARIETY MEAN	0.23	2.27	1.51	0.57	0.25		
	COEFFICIENT OF VARIATION	29.44%	2.91%	17.63%	5.66%	21.53%		
	5% LSD VARIETY MEANS (*****=NS)	*****	6.49	4.31	1.64	0.71		
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)								
YIELD	KG/HA	-0.54++	0.72++	0.84++	-0.03	-0.35++		
DAYS TO FLOWER		-0.27+	0.44++	0.42++	0.05	-0.33+		
DAYS TO MATURITY		0.27+	0.04	0.09	-0.02	0.18		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT HEIGHT		-0.28+	0.67++	0.74++	-0.15	-0.33++		
LODGING		-0.29+	0.37++	0.65++	-0.27+	-0.29+		
SHATTER		1.00	-0.35++	-0.49++	0.12	0.45++		
PLANTS HARVEST		-0.35++	1.00	0.72++	-0.04	-0.41++		
PODS PER PLANT		-0.49++	0.72++	1.00	-0.30+	-0.38++		
100 SEED WEIGHT		0.12	-0.04	-0.30+	1.00	0.22		
QUALITY OF SEED		0.45++	-0.41++	-0.38++	0.22	1.00		

TABLE 97 EXPERIMENT 130 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
7	DAVIS	1.00	145.50	62.50	21.75	2.00	40.6	23.5
6	BRAGG	1.00	137.00	47.00	21.23	3.00	39.7	23.8
1	JUPITER	1.00	103.50	105.25	20.70	4.00	41.5	23.3
10	HILL	1.00	270.50	46.75	16.70	2.00	39.2	22.9
3	HARDEE	1.00	100.75	83.75	18.83	3.00	41.9	24.3
14	CALLAND	1.00	161.25	44.00	20.68	3.00	41.6	23.4
5	BOSSIER	1.00	151.00	58.25	18.23	3.00	41.0	23.0
4	IMPROVED PELICAN	1.00	148.50	82.00	13.95	3.00	42.3	22.9
2	HAMPTON 266A	1.00	127.50	40.00	25.13	2.75	41.5	24.5
13	WILLIAMS	1.00	156.25	41.00	20.00	2.00	41.8	23.6
9	FORREST	1.00	86.75	66.75	19.63	3.00		
15	SEMMES	1.00	142.00	39.75	20.95	3.00	43.4	22.5
16	LOCAL VARIETY	1.00	122.75	92.75	14.50	3.00	42.9	23.9
11	CLARK 63	1.00	144.50	38.50	18.33	3.00	41.6	23.4
8	TRACY	1.00	109.75	33.75	21.15	4.00		
12	WAYNE	1.25	134.50	36.25	20.90	5.00	41.9	23.6
	GRAND MEAN	1.02	140.13	57.39	19.54	3.05	41.5	23.5
	STANDARD ERROR OF A VARIETY MEAN	0.06	12.48	5.19	0.89	0.06		
	COEFFICIENT OF VARIATION	12.31%	17.81%	18.08%	9.12%	4.10%		
	5% LSD VARIETY MEANS (*****=NS)	*****	35.55	14.78	2.54	0.18		
C O R R E L A T I O N S								
	YIELD	0.08	0.27+	0.24	-0.02	-0.43++		
	KG/HA	-0.14	0.22	-0.09	0.13	-0.09		
	DAYS TO FLOWER	0.02	-0.29+	0.45++	0.01	0.53++		
	DAYS TO MATURITY	0.00	0.00	0.00	0.00	0.00		
	NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00		
	NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00		
	PLANT	0.02	0.02	0.59++	-0.54++	0.08		
	HEIGHT	-0.04	0.03	0.40++	-0.56++	-0.02		
	LODGING	1.00	0.01	-0.08	0.12	0.32++		
	SHATTER	0.01	1.00	-0.30+	-0.20	-0.40++		
	HARVEST	-0.03	-0.30+	1.00	-0.42++	0.02		
	PLANTS	0.12	-0.20	-0.42++	1.00	0.14		
	PODS PER	0.32++	-0.40++	0.02	0.14	1.00		
	100 SEED							
	WEIGHT							
	QUALITY OF SEED							

++ - PROB=.01)

(+ - PROB=.05

TABLE 98

EXPERIMENT 131

YEAR 1974

REGION - SOUTH AMERICA
 SITE - PALOMETILLAS
 LATITUDE - 17 DEG. 20 MIN. S
 DATE PLANTED - JANUARY 15, 1975
 SOIL TYPE - SILT, PH 5.2
 AMOUNT OF MOISTURE - 550 MM
 LOCAL VARIETIES - COLOMBIA

COUNTRY - BOLIVIA
 COOPERATOR - VIDAL V. RIVAS
 ELEVATION - 260 M
 DATE HARVESTED - MAY, 1975

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	3942.45	44.25	123.25	200.00	162.50	1.03	2.23	71.00	2.25
5	BOSSIER	3620.31	46.25	121.25	212.50	275.00	0.88	2.80	64.25	1.25
14	CALLAND	3578.63	36.25	109.75	127.50	172.50	0.28	3.28	50.25	1.00
15	COLOMBIA	3444.86	50.75	123.75	322.50	382.50	2.70	4.75	86.75	2.25
2	HAMPTON 266A	3323.58	35.25	126.25	175.00	297.50	0.80	2.70	37.00	1.00
4	IMPROVED PELICAN	3277.74	39.75	111.50	162.50	197.50	0.92	2.05	67.25	1.50
9	PORREST	3019.35	36.00	121.50	62.50	95.00	0.15	0.52	27.50	1.00
13	WILLIAMS	2810.15	34.25	105.25	232.50	235.00	0.72	2.05	41.00	1.25
6	BAGG	2715.13	34.00	125.00	120.00	262.50	0.25	1.48	35.00	1.00
11	CLARK 63	2663.03	35.75	102.75	140.00	200.00	0.38	3.08	44.00	2.00
7	DAVIS	2538.42	37.25	123.75	280.00	322.50	1.73	4.08	35.50	1.00
12	WAYNE	2523.42	34.75	100.25	125.00	135.00	0.35	1.28	41.75	2.00
10	HILL	2417.98	36.75	105.25	175.00	197.50	0.45	1.73	44.25	1.25
8	TRACY	2408.81	36.00	107.25	260.00	327.50	0.82	3.43	26.75	1.00
3	HARDEE	1155.65	40.00	121.50	0.00	0.00	0.00	0.00	25.25	1.00
	GRAND MEAN	2895.97	38.48	115.22	173.00	217.50	0.76	2.36	46.50	1.38
	STANDARD ERROR OF A VARIETY MEAN	211.50	0.22	0.25	23.47	38.20	0.21	0.57	2.63	0.14
	COEFFICIENT OF VARIATION	14.61%	1.13%	0.44%	27.13%	35.13%	54.44%	47.87%	11.29%	19.64%
	5% LSD VARIETY MEANS (*****=NS)	603.63	0.62	0.72	66.98	109.03	0.59	1.61	7.49	0.39

(+ - PROB=.05 +- - PROB=.01)

C O R R E L A T I O N S									
YIELD	KG/HA	0.33+	0.18	0.26+	0.27+	0.21	0.22	0.62++	0.35++
DAYS TO FLOWER	0.33+	1.00	0.43++	0.34++	0.19	0.58+	0.28+	0.77++	0.44++
DAYS TO MATURITY	0.18	0.43++	1.00	0.03	0.15	0.29+	0.05	0.13	-0.16
NODULE NUMBER 1	0.26+	0.34++	0.03	1.00	0.68++	0.82+	0.60++	0.41++	0.12
NODULE NUMBER 2	0.27+	0.19	0.15	0.68++	1.00	0.59++	0.74++	0.31+	0.04
NODULE WEIGHT 1	0.21	0.58++	0.29+	0.82++	0.59++	1.00	0.64++	0.55+	0.26+
NODULE WEIGHT 2	0.22	0.28+	0.05	0.60++	0.74++	0.64++	1.00	0.37++	0.10
PLANT HEIGHT	0.62++	0.77++	0.13	0.41++	0.31+	0.55++	0.37++	1.00	0.62++
LODGING	0.35++	-0.44++	-0.16	0.12	0.04	0.26+	0.10	0.62++	1.00
SHATTER	-0.09	-0.22	0.10	0.00	-0.08	-0.07	-0.11	-0.34++	-0.34++
PLANTS HARVEST	0.51++	0.04	-0.28+	0.42++	0.50++	0.20	0.43++	0.39++	0.22
PODS PER PLANT	-0.02	0.45++	0.26+	-0.24	-0.27+	0.08	-0.14	0.31+	0.18
100 SEED WEIGHT	0.01	-0.10	0.35++	-0.13	-0.02	-0.13	-0.09	-0.23	-0.04
QUALITY OF SEED	-0.33++	-0.63++	-0.05	-0.15	0.02	-0.25	-0.12	-0.65++	-0.28+

TABLE 98

EXPERIMENT 131

YEAR 1974

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.25	139.50	61.00	21.40	2.00	39.8	23.2
5	BOSSIER	1.00	190.00	37.25	17.83	2.00	41.5	21.9
14	CALLAND	1.50	152.50	40.50	20.43	3.00	40.9	21.2
15	COLOMBIA	1.00	150.75	70.50	18.73	1.50	39.4	23.9
2	HAMPTON 266A	1.75	150.25	38.00	23.05	3.00	42.6	22.3
4	IMPROVED PELICAN	1.00	121.25	83.50	14.03	1.75	42.8	22.2
9	FORREST	2.00	96.00	58.50	17.95	3.50	40.2	21.8
13	WILLIAMS	1.25	146.25	44.50	20.38	2.50	41.2	21.9
6	BRAGG	1.00	145.00	33.00	20.35	4.50	39.6	23.1
11	CLARK 63	1.00	161.50	37.25	18.05	2.75	40.3	21.9
7	DAVIS	1.25	128.75	38.00	18.35	4.25	40.4	21.2
12	WAYNE	1.00	151.50	37.00	18.98	4.50	40.8	22.4
10	HILL	1.00	197.50	30.50	15.60	2.25	40.2	21.6
8	TRACY	2.00	136.50	39.50	19.30	3.75	39.9	20.6
3	HARDEE	1.25	19.75	82.50	21.63	2.75	42.5	22.7
	GRAND MEAN	1.28	139.13	48.77	19.07	2.93	40.8	22.1
	STANDARD ERROR OF A VARIETY MEAN	0.19	8.58	3.90	0.45	0.23		
	COEFFICIENT OF VARIATION	28.87%	12.34%	15.98%	4.75%	15.40%		
	5% LSD VARIETY MEANS (*****=NS)	0.53	24.49	11.12	1.29	0.64		
C O R R E L A T I O N S								
				(+ - PROB=.05		+ + - PROB=.01)		
YIELD	KG/HA	-0.09	0.51++	-0.02	0.01	-0.33++		
DAYS TO	FLOWER	-0.22	0.04	0.45++	-0.10	-0.63++		
DAYS TO	MATURITY	0.10	-0.28+	0.26+	0.35++	-0.05		
NODULE	NUMBER 1	0.00	0.42++	-0.24	-0.13	-0.15		
NODULE	NUMBER 2	-0.08	0.50++	-0.27+	-0.02	0.02		
NODULE	WEIGHT 1	-0.07	0.20	0.08	-0.13	-0.25		
NODULE	WEIGHT 2	-0.11	0.43++	-0.14	-0.09	-0.12		
PLANT	HEIGHT	-0.34++	0.39++	0.31+	-0.23	-0.65++		
LODGING		-0.34++	0.22	0.18	-0.04	-0.28+		
SHATTER		1.00	-0.27+	-0.05	0.22	0.24		
PLANTS	HARVEST	-0.27+	1.00	-0.59++	-0.26+	-0.12		
PODS PER	PLANT	-0.05	-0.59++	1.00	-0.10	-0.47++		
100 SEED	WEIGHT	0.22	-0.26+	-0.10	1.00	0.22		
QUALITY	OF SEED	0.24	-0.12	-0.47++	0.22	1.00		

TABLE 99

EXPERIMENT 128

YEAR 1974

REGION - SOUTH AMERICA

COUNTRY - BOLIVIA

SITE - PALOMETILLAS

COOPERATOR - VIDAL V. RIVAS

LATITUDE - 17 DEG. 20 MIN. S

ELEVATION - 260 M

DATE PLANTED - FEBRUARY 6, 1975

DATE HARVESTED - MAY, 1975

SOIL TYPE - SILT, PH 7.0

AMOUNT OF MOISTURE - 550 MM

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	2863.07	39.25	106.25	112.50	1400.00	1.00	4.78	76.75	1.50
2	HAMPTON 266A	2631.78	32.25	100.25	202.50	202.50	1.65	3.00	35.00	1.00
15	SENNES	2549.26	30.50	103.75	115.00	182.50	0.57	2.25	35.25	1.00
9	PORREST	2538.42	32.75	95.25	100.00	485.00	0.65	2.25	35.50	1.00
7	DAVIS	2529.67	34.75	104.50	120.00	807.50	1.25	3.10	34.75	1.00
6	BAGG	2502.17	30.75	105.25	130.00	175.00	0.77	2.18	39.75	1.00
14	CALLAND	2428.40	28.25	102.25	135.00	177.50	1.40	3.65	41.25	1.00
5	BOSSIER	2272.95	39.25	99.25	165.00	1162.50	1.43	5.87	50.00	1.00
11	CLARK 63	2040.82	29.25	96.25	200.00	167.50	1.28	2.93	44.50	1.00
12	WAYNE	2033.74	28.25	90.75	157.50	150.00	1.10	2.88	43.50	1.00
13	WILLIAMS	1951.64	29.50	88.50	147.50	127.50	0.95	1.98	35.75	1.00
4	IMPROVED PELICAN	1942.89	38.25	93.25	92.50	1495.00	0.95	5.95	58.75	1.00
3	HARDEE	1798.69	35.00	103.25	107.50	430.00	1.35	2.10	26.50	1.00
8	TRACY	1777.44	29.75	89.25	192.50	177.50	1.05	2.95	34.00	1.00
10	HILL	1733.26	34.00	90.75	100.00	312.50	0.85	2.68	37.25	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN										
COEFFICIENT OF VARIATION										
5% LSD VARIETY MEANS (*****=NS)										
C O R R E L A T I O N S										
(+ - PROB=-.05 ++ - PROB=-.01)										
YIELD	KG/HA	1.00	0.15	0.54++	-0.18	0.19	-0.21	0.18	0.40++	0.28+
DAYS TO FLOWER	0.15	0.54++	1.00	0.29+	-0.34++	0.80++	0.02	0.60++	0.53++	0.31+
DAYS TO MATURITY	0.54++	0.29+	1.00	0.15	-0.15	0.21	0.11	0.08	0.15	0.24
NODULE NUMBER 1	-0.18	-0.34++	-0.15	-0.15	1.00	-0.28+	0.33+	0.00	-0.16	-0.12
NODULE NUMBER 2	0.19	0.80++	0.21	0.21	-0.28+	1.00	0.04	0.80++	0.60++	0.34++
NODULE WEIGHT 1	-0.21	0.02	0.11	0.33+	0.33+	0.04	1.00	0.16	-0.06	-0.07
NODULE WEIGHT 2	0.18	0.60++	0.08	0.08	0.00	0.80++	0.16	1.00	0.65++	0.17
PLANT HEIGHT	0.40++	0.53++	0.15	0.15	-0.16	0.60++	-0.06	0.65++	1.00	0.51++
LODGING	0.28+	0.31+	0.24	0.24	-0.12	0.34++	-0.07	0.17	0.51++	1.00
SHATTER	0.12	-0.14	0.17	0.17	-0.00	-0.16	0.07	-0.13	-0.12	-0.10
PLANTS HARVEST	0.27+	-0.13	-0.18	-0.18	0.17	0.07	-0.08	0.25	0.36++	0.06
PODS PER PLANT	0.04	0.42++	0.26+	0.26+	-0.37++	0.23	-0.15	-0.02	-0.02	0.05
100 SEED WEIGHT	0.30+	-0.51++	0.27+	0.27+	0.42++	-0.39++	0.18	-0.25	-0.13	0.05
QUALITY OF SEED	-0.03	-0.70++	-0.05	-0.05	0.29+	-0.51++	0.10	-0.34++	-0.34++	-0.15

TABLE 99

EXPERIMENT 128

YEAR 1974

(CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.25	195.50	31.75	19.03	1.75	40.3	22.2
2	HAMPTON 266A	1.75	194.00	24.50	21.23	2.75	41.4	23.2
15	SEMMES	1.00	195.75	26.75	17.45	2.50	42.4	21.0
9	FORREST	1.25	176.50	34.50	15.25	3.00	39.0	23.0
7	DAVIS	1.00	195.25	22.25	18.68	2.75	40.8	23.1
6	BRAGG	1.25	196.75	22.75	19.73	3.50	41.4	23.0
14	CALLAND	2.00	195.75	17.25	21.80	4.00	41.0	21.6
5	BOSSIER	1.00	196.00	25.75	15.20	1.25	40.2	22.7
11	CLARK 63	1.00	190.75	22.25	18.25	3.25	40.8	23.0
12	WAYNE	1.25	195.00	19.00	18.30	4.00	40.6	22.8
13	WILLIAMS	1.00	191.50	19.25	19.60	2.00	41.0	22.8
4	IMPROVED PELICAN	1.00	195.25	30.75	13.38	1.75	42.3	21.9
3	HARDEE	1.75	75.50	54.50	18.03	2.75	42.2	22.0
8	TRACY	1.25	193.00	20.75	19.25	4.00	41.8	20.6
10	HILL	1.25	194.50	22.75	15.45	2.00	37.0	23.2
	GRAND MEAN	1.27	185.40	26.32	18.04	2.75	40.8	22.4
	STANDARD ERROR OF A VARIETY MEAN	0.22	3.75	2.97	0.56	0.26		
	COEFFICIENT OF VARIATION	34.46%	4.04%	22.59%	6.16%	18.55%		
	5% LSD VARIETY MEANS (*****=NS)	0.62	10.69	8.48	1.59	0.73		
C O R R E L A T I O N S								
			(+ - PROB=.05	++ - PROB=.01)				
YIELD	KG/HA	0.12	0.27 +	0.04	0.30 +	-0.03		
DAYS TO	FLOWER	-0.14	-0.13	0.42++	-0.51++	-0.70++		
DAYS TO	MATURITY	0.17	-0.18	0.26+	0.27+	-0.05		
NODULE NUMBER	1	-0.00	0.17	-0.37++	0.42++	0.29+		
NODULE NUMBER	2	-0.16	0.07	0.23	-0.39++	-0.51++		
NODULE WEIGHT	1	0.07	-0.08	-0.15	0.18	0.10		
NODULE WEIGHT	2	-0.13	0.25	-0.02	-0.25	-0.34++		
PLANT	HEIGHT	-0.12	0.36++	-0.02	-0.13	-0.34++		
LODGING		-0.10	0.06	0.05	0.05	-0.15		
SHATTER		1.00	-0.21	0.14	0.31+	0.22		
PLANTS	HARVEST	-0.21	1.00	-0.77++	0.01	-0.02		
PODS PER	PLANT	0.14	-0.77++	1.00	-0.23	-0.20		
100 SEED	WEIGHT	0.31+	0.01	-0.23	1.00	0.49++		
QUALITY	OF SEED	0.22	-0.02	-0.20	0.49++	1.00		

TABLE 100

EXPERIMENT 52

YEAR 1974

REGION - SOUTH AMERICA
 SITE - SANTA CRUZ
 LATITUDE - 17 DEG. 14 MIN. S
 DATE PLANTED - MAY 18, 1974
 SOIL TYPE - SILT, PH 6.7
 FERTILIZER USED (KG/HA) - N 62.5, P 62.5, K 102.1
 AMOUNT OF MOISTURE - 289 MM
 NUMBER OF IRRIGATIONS - 1 (58 MM)
 LOCAL VARIETIES - PELICANO, ACADIAN

COUNTRY - BOLIVIA
 COOPERATOR - HERBERT ZURITA OVANDO
 ELEVATION - 320 M
 DATE HARVESTED - SEPTEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPITER	1866.21	42.00	120.00	43.25	55.25	0.00	0.00	52.75	2.25
4	IMPROVED PELICAN	1857.45	41.75	103.00	34.25	40.25	0.00	0.00	41.50	1.75
3	HARDEE	1798.28	36.00	103.00	90.00	164.00	0.00	0.00	23.50	1.00
5	BOSSIER	1774.10	34.00	97.00	82.75	106.75	0.00	0.00	28.00	1.50
11	CLARK 63	1745.77	30.00	95.00	105.25	231.00	0.00	0.00	31.25	2.00
14	PELICANO	1741.18	51.00	110.00	47.50	68.25	0.00	0.00	50.50	1.25
15	ACADIAN	1675.33	46.75	103.00	43.00	67.25	0.00	0.00	40.25	2.00
7	DAVIS	1638.66	33.00	103.00	68.00	193.25	0.00	0.00	20.75	1.00
9	FORREST	1578.23	32.00	97.00	49.75	77.25	0.00	0.00	27.75	1.00
10	HILL	1444.87	35.00	93.75	81.50	141.25	0.00	0.00	24.75	1.75
13	WILLIAMS	1391.94	33.00	92.75	78.00	108.25	0.00	0.00	27.75	2.00
12	BONUS	1374.86	33.00	103.00	69.75	108.25	0.00	0.00	27.50	1.00
6	BAGG	1243.17	33.00	110.00	49.50	95.00	0.00	0.00	23.25	1.00
2	HAMPTON 266A	1179.40	33.00	110.00	109.00	216.00	0.00	0.00	23.50	1.00
8	TRACY	837.25	30.00	92.75	93.50	106.25	0.00	0.00	15.50	1.00
GRAND MEAN		1543.11	36.23	102.22	69.67	118.55	0.00	0.00	30.57	1.43
STANDARD ERROR OF A VARIETY MEAN		104.91	2.00	0.28	14.86	47.02	0.00	0.00	2.29	0.15
COEFFICIENT OF VARIATION		13.60%	11.04%	0.54%	42.65%	79.33%	0.00%	0.00%	14.97%	21.35%
5% LSD VARIETY MEANS (*****=NS)		299.43	5.71	0.79	42.40	*****	0.00	0.00	6.53	0.44
C O R R E L A T I O N S										
		(+ - PROB=.05			+ + - PROB=.01)					
YIELD	KG/HA	1.00	0.44++	0.23	-0.21	-0.15	0.00	0.00	0.62++	0.44++
DAYS TO FLOWER	1.00	0.44++	1.00	0.45++	-0.39++	-0.30+	0.00	0.00	0.68++	0.26+
DAYS TO MATURITY	0.23	0.45++	0.45++	1.00	-0.27+	-0.12	0.00	0.00	0.53++	0.01
NODULE NUMBER 1	-0.21	-0.39++	-0.39++	-0.27+	1.00	0.78++	0.00	0.00	-0.37++	-0.08
NODULE NUMBER 2	-0.15	-0.30+	-0.30+	-0.12	0.78++	1.00	0.00	0.00	-0.28+	-0.08
NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
PLANT HEIGHT	0.62++	0.68++	0.68++	0.53++	-0.37++	-0.28+	0.00	0.00	0.00	0.00
LODGING	0.44++	0.26+	0.26+	0.01	-0.08	-0.08	0.00	0.00	0.00	0.51++
SHATTER	-0.25	0.06	0.06	0.16	0.03	-0.04	0.00	0.00	-0.18	-0.26+
HARVEST	0.42++	0.38++	0.38++	0.50++	-0.15	-0.11	0.00	0.00	0.46++	0.17
PLANTS PER 100 SEED	0.40++	0.37++	0.37++	-0.00	-0.24	-0.06	0.00	0.00	0.48++	0.41++
WEIGHT	-0.37++	-0.57++	-0.57++	0.12	0.25	0.21	0.00	0.00	-0.51++	-0.36++
QUALITY OF SEED	-0.13	-0.04	-0.04	0.34++	0.04	0.12	0.00	0.00	0.01	-0.07

TABLE 100 EXPERIMENT 52 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.50	181.75	25.48	15.50	3.25	40.4	19.7
4	IMPROVED PELICAN	1.25	141.00	28.53	13.25	1.25	45.0	17.9
3	HARDEE	1.75	136.75	25.13	15.25	2.25	41.8	18.5
5	BOSSIER	1.00	177.25	22.15	14.00	1.75	40.8	18.8
11	CLARK 63	1.00	147.75	29.95	14.75	2.00	40.7	18.4
14	PELICANO	1.50	183.75	30.63	11.50	1.50	45.9	17.8
15	ACADIAN	1.25	171.25	29.78	11.75	1.75	44.4	17.9
7	DAVIS	1.75	157.00	19.65	16.50	2.25	40.0	19.5
9	FORREST	1.00	138.75	22.80	14.75	1.00	39.2	18.8
10	HILL	1.75	137.75	22.50	14.00	2.25	39.0	18.2
13	WILLIAMS	1.00	134.75	23.18	15.75	1.50	41.0	18.6
12	BONUS	2.00	158.25	16.65	16.25	2.75	45.2	17.8
6	BRAGG	1.50	161.00	19.15	17.50	1.50	40.8	19.4
2	HAMPTON 266A	1.75	175.50	13.98	18.00	2.75	43.0	17.0
8	TRACY	2.00	126.50	19.35	15.50	2.00	41.7	16.5
	GRAND MEAN	1.47	155.27	23.26	14.95	1.98	41.9	18.3
	STANDARD ERROR OF A VARIETY MEAN	0.20	10.40	2.32	0.49	0.23		
	COEFFICIENT OF VARIATION	26.96%	13.40%	19.96%	6.60%	23.04%		
	5% LSD VARIETY MEANS (*****=NS)	0.56	29.68	6.62	1.41	0.65		
C O R R E L A T I O N S								
			(+ - PROB=.05		+ - PROB=.01)			
YIELD	KG/HA	-0.25	0.42++	0.40++	-0.37++	-0.13		
DAYS TO FLOWER		0.06	0.38++	0.37++	-0.57++	-0.04		
DAYS TO MATURITY		0.16	0.50++	-0.00	0.12	0.34++		
NODULE NUMBER 1		0.03	-0.15	-0.24	0.25	0.04		
NODULE NUMBER 2		-0.04	-0.11	-0.06	0.21	0.12		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT		-0.18	0.46++	0.48++	-0.51++	0.01		
LODGING		-0.26+	0.17	0.41++	-0.36++	-0.07		
SHATTER		1.00	-0.01	-0.36++	0.21	0.29+		
PLANTS HARVEST		-0.01	1.00	-0.03	-0.09	0.10		
PODS PER PLANT		-0.36++	-0.03	1.00	-0.62++	-0.17		
100 SEED WEIGHT		0.21	-0.09	-0.62++	1.00	0.29+		
QUALITY OF SEED		0.29+	0.10	-0.17	0.29+	1.00		

TABLE 101 EXPERIMENT 132 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
5	BOSSIER	0.00	201.75	65.00	0.00	1.00	39.5	23.9
1	JUPITER	0.00	190.00	81.25	0.00	3.00	40.3	24.5
4	IMPROVED PELICAN	0.00	200.00	52.50	0.00	2.00	42.8	22.7
15	PELICANO	0.00	154.00	75.75	0.00	1.50	43.8	22.1
13	WILLIAMS	0.00	200.00	27.00	0.00	5.00	43.9	23.0
3	HARDEE	0.00	68.75	62.00	0.00	1.00	44.1	22.5
10	HILL	0.00	200.00	21.50	0.00	4.00	43.5	21.3
14	PAIMETAU	0.00	177.50	86.50	0.00	3.00	44.3	18.1
11	CLARK 63	0.00	160.00	34.00	0.00	2.00	45.5	21.9
12	HAMPTON 266A	0.00	200.00	17.00	0.00	3.50	43.4	22.3
6	WAYNE	0.00	186.75	28.00	0.00	5.00	46.3	19.7
7	BRAGG	0.00	175.00	33.25	0.00	5.00		
9	DAVIS	0.00	195.00	29.75	0.00	2.00	41.8	22.5
8	FORREST	0.00	180.00	32.00	0.00	5.00	43.6	22.2
	TRACY	0.00	55.00	27.50	0.00	5.00	48.0	17.7
	GRAND MEAN	0.00	169.58	44.87	0.00	3.20	43.6	21.7
	STANDARD ERROR OF A VARIETY MEAN	0.00	9.89	5.79	0.00	0.18		
	COEFFICIENT OF VARIATION	0.00%	11.67%	25.79%	0.00%	11.55%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	28.23	16.51	0.00	0.53		
C O R R E L A T I O N S								
	YIELD	0.00	0.27+	0.34++	0.00	-0.50++		
	KG/HA	0.00	0.30+	0.21	0.00	0.03		
	DAYS TO FLOWER	0.00	0.21	0.24	0.00	-0.13		
	DAYS TO MATURITY	0.00	0.00	0.00	0.00	0.00		
	NODULE NUMBER 1	0.00	0.00	0.00	0.00	0.00		
	NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 1	0.00	0.00	0.00	0.00	0.00		
	NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00		
	PLANT	0.00	0.29+	0.49++	0.00	-0.35++		
	HEIGHT	0.00	0.00	0.00	0.00	0.00		
	LODGING	0.00	0.00	0.00	0.00	0.00		
	SHATTER	1.00	0.00	0.00	0.00	0.00		
	HARVEST	0.00	1.00	-0.09	0.00	0.04		
	PLANTS	0.00	-0.09	1.00	0.00	-0.48++		
	PODS PER PLANT	0.00	0.00	0.00	1.00	0.00		
	100 SEED WEIGHT	0.00	0.04	-0.48++	0.00	1.00		
	QUALITY OF SEED	0.00			0.00			

TABLE 102

EXPERIMENT 12

YEAR 1974

REGION - SOUTH AMERICA

SITE - IBAGUE

LATITUDE - 4 DEG. 42 MIN. N

DATE PLANTED - APRIL 24, 1974

SOIL TYPE - SANDY LOAM

AMOUNT OF MOISTURE - 547 MM

NUMBER OF IRRIGATIONS - 7

COUNTRY - COLOMBIA

COOPERATOR - D. SALAZAR, L. CAMACHO

ELEVATION - 385 M

DATE HARVESTED - JULY, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
1	JUPIER	3649.90	31.75	99.00	87.50	487.25	0.81	4.90	77.50	2.00
5	BOSSIER	3298.58	33.50	89.00	117.50	506.25	0.92	5.33	56.00	1.25
3	HARDEE	2996.43	29.00	90.75	41.75	450.00	0.53	3.05	32.25	1.00
2	HAMPTON 266A	2959.34	25.00	89.50	66.00	627.00	0.40	4.50	29.75	1.00
4	IMPROVED PELICAN	2830.15	31.00	85.75	90.25	365.25	0.88	3.40	71.25	1.50
13	WILLIAMS	2778.89	21.00	76.50	125.75	374.50	0.36	4.82	52.25	1.00
6	BRAGG	2756.80	25.00	86.50	36.75	332.25	0.14	3.15	34.00	1.00
10	HILL	2662.62	27.50	80.50	43.25	138.50	0.25	2.78	29.50	1.00
7	DAVIS	2653.45	27.00	91.25	63.25	292.00	0.70	3.20	30.75	1.00
15	SEMHES	2512.59	25.00	88.00	34.50	397.75	0.42	2.93	26.00	1.00
14	CALLAND	2493.42	21.00	81.25	69.00	359.75	0.20	4.48	54.00	1.00
12	BONUS	2330.05	20.50	77.25	78.50	287.75	0.30	3.08	51.50	1.25
8	TRACY	2304.63	21.00	80.00	78.50	309.50	0.39	5.08	29.50	1.00
9	FORREST	2266.70	25.00	84.00	29.00	363.50	0.13	2.50	32.25	1.00
11	CLARK 63	2257.95	21.00	79.75	114.75	245.25	0.35	3.40	49.25	1.00
GRAND MEAN		2716.77	25.62	85.27	71.75	369.10	0.45	3.77	43.72	1.13
STANDARD ERROR OF A VARIETY MEAN		171.67	0.18	1.15	16.97	83.42	0.12	0.67	2.01	0.12
COEFFICIENT OF VARIATION		12.64%	1.42%	2.69%	47.32%	45.20%	53.69%	35.33%	9.18%	20.35%
5% LSD VARIETY MEANS (*****=NS)		489.95	0.52	3.28	48.45	238.07	0.35	1.90	5.73	0.33
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00	0.59++	0.67++	0.24	0.39++	0.57++	0.43++	0.38++	0.44++
DAYS TO	FLOWER	0.59++	1.00	0.70++	-0.02	0.23	0.55++	0.04	0.31+	0.47++
DAYS TO	MATURITY	0.67++	0.70++	1.00	-0.12	0.37++	0.47++	0.14	0.13	0.42++
NODULE	NUMBER 1	0.24	-0.02	-0.12	1.00	0.20	0.60++	0.52++	0.47++	0.15
NODULE	NUMBER 2	0.39++	0.23	0.37++	0.20	1.00	0.43++	0.46++	0.09	0.18
NODULE	WEIGHT 1	0.57++	0.55++	0.47++	0.60++	0.43++	1.00	0.45++	0.38++	0.38++
NODULE	WEIGHT 2	0.43++	0.04	0.14	0.52++	0.46++	0.45++	1.00	0.24	0.13
PLANT	HEIGHT	0.38++	0.31+	0.13	0.47++	0.09	0.38++	0.24	1.00	0.66++
LODGING		0.44++	0.47++	0.42++	0.15	0.18	0.38++	0.13	0.66++	1.00
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARVEST		0.23	0.15	0.08	0.26+	0.05	0.18	0.11	0.38++	0.25
PLANTS	PER	0.66++	0.68++	0.65++	0.18	0.29+	0.62++	0.19	0.44++	0.55++
PODS PER	PLANT	0.36++	-0.26+	0.29+	0.01	0.23	-0.04	0.40++	-0.28+	-0.14
100 SEED	WEIGHT	0.36++	-0.26+	0.29+	0.01	0.23	-0.04	0.40++	-0.28+	-0.14
QUALITY	OF SEED	-0.00	-0.15	-0.08	-0.19	-0.07	-0.25	0.06	-0.24	-0.13

TABLE 102 EXPERIMENT 12 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPIER	1.00	196.00	48.25	18.73	2.25	41.3	24.5
5	BOSSIER	1.00	192.00	36.00	16.15	2.00	43.3	23.4
3	HARDEE	1.00	166.00	38.00	17.18	2.00	44.1	23.7
2	HAMPTON 266A	1.00	166.00	33.00	21.35	2.75	40.5	24.8
4	IMPROVED PELICAN	1.00	177.00	46.50	13.00	1.75	42.1	24.6
13	WILLIAMS	1.00	174.25	29.00	18.75	2.00	41.5	24.8
6	BRAGG	1.00	198.50	31.50	19.00	2.50	43.7	23.7
10	HILL	1.00	166.25	29.50	16.90	3.25	42.0	22.2
7	DAVIS	1.00	165.50	35.50	18.03	2.25	41.5	24.8
15	SEMME	1.00	183.50	28.50	18.70	2.00	44.5	23.1
14	CALLAND	1.00	172.50	27.75	18.90	3.00	41.5	23.5
12	BONUS	1.00	193.75	26.00	16.48	2.00	43.7	23.7
8	TRACY	1.00	158.25	28.75	18.03	2.50	44.8	21.1
9	FORREST	1.00	147.00	32.25	14.95	2.25	43.2	22.3
11	CLARK 63	1.00	177.25	26.75	16.83	2.00	39.5	26.2
	GRAND MEAN	1.00	175.58	33.15	17.53	2.30	42.5	23.8
	STANDARD ERROR OF A VARIETY MEAN	0.00	9.26	2.35	0.55	0.19		
	COEFFICIENT OF VARIATION	0.00%	10.55%	14.20%	6.27%	16.84%		
	5% LSD VARIETY MEANS (*****= NS)	0.00	26.42	6.72	1.57	0.55		
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)								
	YIELD KG/HA	0.00	0.23	0.66++	0.36++	-0.00		
	DAYS TO FLOWER	0.00	0.15	0.68++	-0.26+	-0.15		
	DAYS TO MATURITY	0.00	0.08	0.65++	0.29+	-0.08		
	NODULE NUMBER 1	0.00	0.26+	0.18	0.01	-0.19		
	NODULE NUMBER 2	0.00	0.05	0.29+	0.23	-0.07		
	NODULE WEIGHT 1	0.00	0.18	0.62++	-0.04	-0.25		
	NODULE WEIGHT 2	0.00	0.11	0.19	0.40++	0.06		
	PLANT HEIGHT	0.00	0.38++	0.44++	-0.28+	-0.24		
	LODGING	0.00	0.25	0.55++	-0.14	-0.13		
	SHATTER	1.00	0.00	0.00	0.00	0.00		
	PLANTS HARVEST	0.00	1.00	0.10	-0.04	-0.05		
	PODS PER PLANT	0.00	0.10	1.00	-0.07	-0.13		
	100 SEED WEIGHT	0.00	-0.04	-0.07	1.00	0.32+		
	QUALITY OF SEED	0.00	-0.05	-0.13	0.32+	1.00		

TABLE 103	EXPERIMENT 140	YEAR 1974
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REGION - SOUTH AMERICA
SITE - MOTILONIA
LATITUDE - 10 DEG. N
DATE PLANTED - SEPTEMBER 25, 1974
COUNTRY - COLOMBIA
COOPERATOR - GILBERTO BASTIDAS R.
ELEVATION - 13 M
DATE HARVESTED - DECEMBER, 1974

[illegible]

TABLE 103 EXPERIMENT 140 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
7	DAVIS	1.25	0.00	0.00	0.00	0.00	39.3	23.8
5	BOSSIER	1.00	0.00	0.00	0.00	0.00	41.6	23.3
6	BRAGG	1.00	0.00	0.00	0.00	0.00	40.0	23.5
13	WILLIAMS	1.00	0.00	0.00	0.00	0.00	41.3	23.5
1	JUPITER	1.00	0.00	0.00	0.00	0.00	39.3	24.1
2	HAMPTON 266A	1.00	0.00	0.00	0.00	0.00	39.4	24.2
9	FORREST	1.00	0.00	0.00	0.00	0.00	40.4	22.8
14	CALLAND	1.00	0.00	0.00	0.00	0.00	41.4	21.1
11	CLARK 63	1.00	0.00	0.00	0.00	0.00	40.8	23.7
12	BONUS	1.75	0.00	0.00	0.00	0.00	40.4	23.8
3	HARDEE	1.00	0.00	0.00	0.00	0.00	40.8	23.6
4	IMPROVED PELICAN	1.00	0.00	0.00	0.00	0.00	41.3	22.9
10	HILL	1.75	0.00	0.00	0.00	0.00	39.5	22.6
8	TRACY	1.75	0.00	0.00	0.00	0.00	41.8	21.3
15	SEMME	1.00	0.00	0.00	0.00	0.00	42.2	23.8
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN								
COEFFICIENT OF VARIATION								
5% LSD VARIETY MEANS (*****=NS)								
C O R R E L A T I O N S								
(+ - PROB=.05 ++ - PROB=.01)								
YIELD	KG/HA	-0.26+	0.00	0.00	0.00	0.00		
DAYS TO FLOWER		-0.36++	0.00	0.00	0.00	0.00		
DAYS TO MATURITY		-0.49++	0.00	0.00	0.00	0.00		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT	HEIGHT	-0.15	0.00	0.00	0.00	0.00		
LODGING		-0.06	0.00	0.00	0.00	0.00		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS	HARVEST	0.00	1.00	0.00	0.00	0.00		
PODS PER	PLANT	0.00	0.00	1.00	0.00	0.00		
100 SEED	WEIGHT	0.00	0.00	0.00	1.00	0.00		
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00		

TABLE 104

EXPERIMENT 22

YEAR 1974

REGION - SOUTH AMERICA
 SITE - BOLICHE
 LATITUDE - 2 DEG. 21 MIN. S
 DATE PLANTED - APRIL 16, 1974
 SOIL TYPE - SAND 28%, SILT 53%, CLAY 19%, PH 7.0
 AMOUNT OF MOISTURE - 315 MM
 NUMBER OF IRRIGATIONS - 5 (270 MM)
 LOCAL VARIETIES - AMERICANA

COUNTRY - ECUADOR
 COOPERATOR - I.N.I.A.P.
 ELEVATION - 17 M
 DATE HARVESTED - JULY, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
5	BOSSIER	4621.34	36.50	104.25	208.00	447.25	1.27	3.31	3.31	51.60	3.75
1	JUPITER	4300.03	42.00	112.00	168.75	256.25	1.18	2.19	2.19	73.45	1.50
3	HARDEE	4107.07	32.00	105.00	154.75	302.75	0.87	2.76	2.76	32.90	1.00
14	CALLAND	4106.65	25.00	98.00	69.50	164.50	0.31	2.01	2.01	57.85	1.00
7	DAVIS	3986.21	29.25	105.00	146.50	247.75	0.66	1.86	1.86	30.30	1.00
13	WILLIAMS	3932.45	25.25	90.00	144.75	224.00	0.63	2.29	2.29	55.30	1.25
4	IMPROVED PELICAN	3910.78	36.50	104.75	137.50	417.25	0.70	4.70	4.70	86.92	5.00
15	AMERICANA	3883.28	30.75	104.50	203.50	354.75	1.48	3.28	3.28	80.32	4.25
6	BRAGG	3817.85	28.00	105.00	63.25	244.00	0.20	1.90	1.90	36.60	1.00
11	CLARK 63	3722.41	26.00	89.00	66.75	179.50	0.18	2.19	2.19	53.38	2.25
9	FORREST	3658.65	29.25	101.50	59.00	202.00	0.15	1.38	1.38	32.08	1.00
10	HILL	3515.70	31.00	100.75	116.25	182.25	0.57	1.57	1.57	38.90	3.00
2	HAMPTON 266A	3499.03	29.00	105.00	110.50	235.00	0.36	2.06	2.06	29.63	1.00
12	BONUS	3285.66	24.50	88.25	66.00	224.00	0.20	1.91	1.91	48.25	1.00
8	TRACY	2595.94	27.75	88.25	121.25	209.75	0.53	2.65	2.65	27.88	1.00
GRAND MEAN											
STANDARD ERROR OF A VARIETY MEAN											
COEFFICIENT OF VARIATION											
5% LSD VARIETY MEANS (*****=NS)											
C O R R E L A T I O N S											
(* - PROB=.05 ** - PROB=.01)											
YIELD	KG/HA	1.00	0.38**	0.54**	0.35**	0.32*	0.35**	0.13	0.40**	0.26*	
DAYS TO FLOWER		0.38**	1.00	0.68**	0.49**	0.48**	0.56**	0.33*	0.41**	0.43**	
DAYS TO MATURITY		0.54**	0.68**	1.00	0.32*	0.37**	0.38**	0.15	0.19	0.23	
NODULE NUMBER 1		0.35**	0.49**	0.32*	1.00	0.58**	0.88**	0.49**	0.31*	0.34**	
NODULE NUMBER 2		0.32*	0.48**	0.37**	0.58**	1.00	0.56**	0.82**	0.39**	0.50**	
NODULE WEIGHT 1		0.35**	0.56**	0.38**	0.88**	0.56**	1.00	0.50**	0.44**	0.40**	
NODULE WEIGHT 2		0.13	0.33*	0.15	0.49**	0.82**	0.50**	1.00	0.47**	0.51**	
PLANT	HEIGHT	0.40**	0.41**	0.19	0.31*	0.39**	0.44**	0.47**	1.00	0.63**	
LODGING		0.26*	0.43**	0.23	0.34**	0.50**	0.40**	0.51**	0.63**	1.00	
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PLANTS	HARVEST	0.07	-0.33**	-0.30*	0.02	0.03	-0.03	0.13	-0.14	0.01	
PODS PER PLANT		0.58**	0.59**	0.58**	0.31*	0.37**	0.40**	0.24	0.57**	0.42**	
100 SEED WEIGHT		0.06	0.01	0.38**	0.15	-0.06	0.17	-0.21	-0.12	-0.29*	
QUALITY OF SEED		-0.22	-0.54**	-0.15	-0.32*	-0.22	-0.31*	-0.19	-0.47**	-0.36**	

TABLE 104 EXPERIMENT 22 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
5	BOSSIER	1.00	198.50	42.48	21.75	2.25	40.8	22.1
1	JUPITER	1.00	173.75	51.53	24.75	1.50	37.4	22.8
3	HARDEE	1.00	189.00	44.05	21.75	4.00	41.6	21.8
14	CALLAND	1.00	197.75	33.78	22.50	3.75	39.8	21.2
7	DAVIS	1.00	196.25	38.60	23.00	3.25	38.6	21.6
13	WILLIAMS	1.00	200.00	32.73	22.25	2.25	38.9	22.1
4	IMPROVED PELICAN	1.00	189.25	48.05	18.25	1.50	41.3	21.6
15	AMERICANA	1.00	180.25	51.13	25.50	3.00	43.7	19.7
6	BRAGG	1.00	190.25	38.58	24.75	3.75	38.0	23.0
11	CLARK 63	1.00	191.00	34.78	21.00	3.25	38.7	22.1
9	FORREST	1.00	175.50	37.83	21.50	2.00	38.3	22.4
10	HILL	1.00	194.75	28.90	21.25	2.75	39.7	20.9
2	HAMPTON 266A	1.00	190.50	31.40	26.75	4.25	38.5	22.8
12	BONUS	1.00	194.50	32.30	21.25	3.75	40.3	22.2
8	TRACY	1.00	197.25	21.78	22.00	3.00	40.7	20.0
	GRAND MEAN	1.00	190.57	37.86	22.55	2.95	39.8	21.8
	STANDARD ERROR OF A VARIETY MEAN	0.00	6.07	2.86	0.50	0.29		
	COEFFICIENT OF VARIATION	0.00%	6.37%	15.13%	4.41%	19.41%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	*****	8.17	1.42	0.82		
C O R R E L A T I O N S								
				(+ - PROB=-.05		++ - PROB=-.01)		
YIELD	KG/HA	0.00	0.07	0.58++	0.06	-0.22		
DAYS TO FLOWER		0.00	-0.33++	0.59++	0.01	-0.54++		
DAYS TO MATURITY		0.00	-0.30+	0.58++	0.38++	-0.15		
NODULE NUMBER 1		0.00	0.02	0.31+	0.15	-0.32+		
NODULE NUMBER 2		0.00	0.03	0.37++	-0.06	-0.22		
NODULE WEIGHT 1		0.00	-0.03	0.40++	0.17	-0.31+		
NODULE WEIGHT 2		0.00	0.13	0.24	-0.21	-0.19		
PLANT	HEIGHT	0.00	-0.14	0.57++	-0.12	-0.47++		
LODGING		0.00	0.01	0.42++	-0.29+	-0.36++		
SHATTER		1.00	0.00	0.00	0.00	0.00		
HARVEST		0.00	1.00	-0.32+	-0.20	0.18		
PLANTS PER	PLANT	0.00	-0.32+	1.00	0.08	-0.23		
100 SEED	WEIGHT	0.00	-0.20	0.08	1.00	0.28+		
QUALITY	OF SEED	0.00	0.18	-0.23	0.28+	1.00		

TABLE 105 EXPERIMENT 21 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.00	193.50	36.75	22.95	2.00	39.9	21.9
15	AMERICANA	1.00	179.50	35.58	25.58	2.25	44.4	19.1
5	BOSSIER	1.00	188.00	21.68	22.68	2.00	39.4	22.9
4	IMPROVED PELICAN	1.00	179.75	34.63	18.28	1.25	42.8	21.4
7	DAVIS	1.00	176.75	25.83	23.28	2.50	40.2	21.2
2	HAMPTON 266A	1.00	191.50	20.28	24.48	3.25	39.5	22.4
3	HARDEE	1.00	182.50	22.53	19.13	2.00	41.4	21.3
14	CALLAND	1.00	189.00	15.30	24.03	3.75	41.2	20.4
13	WILLIAMS	1.00	186.25	13.23	23.63	2.25	40.5	22.1
6	BRAGG	1.00	193.25	15.85	23.43	2.75	41.3	21.0
9	FORREST	1.00	199.00	18.63	17.95	2.50	38.1	22.0
10	HILL	1.00	185.25	15.48	20.50	1.75	38.1	20.8
11	CLARK 63	1.00	180.75	18.33	20.63	3.25	42.0	20.6
8	TRACY	1.00	186.25	13.58	22.03	2.75	42.0	19.8
12	BONUS	1.00	184.50	16.70	20.55	3.50	40.9	22.0
	GRAND MEAN	1.00	186.38	21.62	21.94	2.52	40.8	21.3
	STANDARD ERROR OF A VARIETY MEAN	0.00	5.51	2.44	0.89	0.28		
	COEFFICIENT OF VARIATION	0.00%	5.91%	22.61%	8.13%	22.58%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	*****	6.98	2.54	0.81		

C O R R E L A T I O N S

++ - PROB=-.01)

(+ - PROB=.05

	YIELD KG/HA	0.01	0.75++	0.44++	-0.32+
DAYS TO FLOWER	0.00	0.00	0.00	0.00	0.00
DAYS TO MATURITY	0.00	0.00	0.00	0.00	0.00
NODULE NUMBER 1	0.00	0.23	0.14	-0.02	-0.21
NODULE NUMBER 2	0.00	0.00	0.00	0.00	0.00
NODULE WEIGHT 1	0.00	0.20	0.01	0.01	-0.11
NODULE WEIGHT 2	0.00	0.00	0.00	0.00	0.00
PLANT HEIGHT	0.00	0.04	0.70++	0.24	-0.30+
LODGING	0.00	-0.21	0.55++	0.17	-0.36++
SHATTER	1.00	0.00	0.00	0.00	0.00
HARVEST	0.00	1.00	-0.30+	-0.02	0.11
PLANTS PER PLANT	0.00	-0.30+	1.00	-0.38++	0.20
PODS PER 100 SEED	0.00	-0.02	0.20	1.00	0.31+
QUALITY OF SEED	0.00	0.11	-0.38++	0.31+	1.00

TABLE 106

EXPERIMENT 20

YEAR 1974

REGION - SOUTH AMERICA

SITE - PORTOVIEJO

LATITUDE - 1 DEG. 4 MIN. S

DATE PLANTED - MARCH 25, 1974

SOIL TYPE - CLAY, PH 7.0

AMOUNT OF MOISTURE - 315 MM

NUMBER OF IRRIGATIONS - 3

LOCAL VARIETIES - AMERICANA

COUNTRY - ECUADOR

COOPERATOR - I.N.I.A.P.

ELEVATION - 44 M

DATE HARVESTED - JUNE, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
13	WILLIAMS	3211.06	25.75	88.25	65.75	111.25	0.14	0.96	58.55	2.00
5	BOSSIER	3207.97	33.00	92.00	77.25	177.75	0.35	1.51	43.65	2.00
14	CALLAND	3182.93	25.00	92.00	23.75	100.75	0.30	0.62	58.20	1.00
17	DAVIS	3127.50	29.50	92.00	88.00	167.75	0.22	1.05	29.70	1.00
4	IMPROVED PELICAN	3048.53	31.00	103.00	85.25	184.00	0.29	1.77	90.50	3.25
1	JUPITER	3018.94	33.00	106.00	67.50	100.25	0.34	1.01	70.80	1.75
6	BRAGG	2989.35	27.25	93.00	40.25	214.25	0.15	1.84	34.55	1.00
11	CLARK 63	2944.55	25.75	89.00	64.50	143.25	0.19	1.36	55.90	2.50
12	BONUS	2881.20	25.75	86.75	62.00	162.50	0.25	1.21	46.50	1.00
3	HARDEE	2856.20	29.00	92.00	76.50	248.75	0.29	1.92	31.85	1.00
15	AMERICANA	2754.80	30.00	103.00	163.50	258.00	0.20	2.21	84.05	3.25
2	HAMPTON 266A	2680.95	27.25	93.00	58.00	127.00	0.13	0.78	27.35	1.00
9	FORREST	2612.73	29.00	89.00	73.25	151.75	0.19	1.66	33.38	1.00
10	HILL	2545.51	30.75	87.50	83.75	120.00	0.33	1.35	32.95	2.00
8	TRACY	1928.51	27.00	83.00	69.00	122.25	0.18	1.51	33.10	1.00
GRAND MEAN										
STANDARD ERROR OF A VARIETY MEAN		2866.05	28.60	92.63	73.22	159.30	0.24	1.38	48.73	1.65
COEFFICIENT OF VARIATION		199.62	0.61	0.67	18.85	35.07	0.08	0.43	2.79	0.43
5% LSD VARIETY MEANS (*****=NS)		13.93%	4.24%	1.45%	51.49%	44.02%	69.56%	62.38%	11.45%	52.12%
		569.72	1.73	1.91	53.80	100.08	*****	*****	7.96	1.23
C O R R E L A T I O N S										
(+ - PROB=.05 +- - PROB=.01)										
YIELD	KG/HA	1.00								
DAYS TO FLOWER		-0.04	1.00							
DAYS TO MATURITY		0.28+	0.50++	1.00						
NODULE NUMBER 1		0.23	0.24	1.00						
NODULE NUMBER 2		-0.08	0.24	0.57++	1.00					
NODULE WEIGHT 1		0.13	0.12	0.57++	0.52++	1.00				
NODULE WEIGHT 2		-0.05	0.17	0.60++	0.52++	0.90++	1.00			
PLANT HEIGHT		0.24	0.19	0.67++	0.26+	0.90++	0.59++	1.00		
LODGING		0.20	0.23	0.38++	0.18	0.09	0.17	0.09	1.00	
SHATTER		0.00	0.00	0.00	0.00	-0.02	0.14	0.14	0.56++	1.00
PLANTS HARVEST		0.44++	-0.14	-0.04	-0.20	-0.11	0.00	0.00	0.00	0.00
PODS PER PLANT		0.32+	0.23	0.55++	0.16	0.04	0.10	-0.30+	0.08	-0.02
100 SEED WEIGHT		0.02	-0.26+	0.09	-0.15	-0.21	-0.27+	-0.04	0.65++	0.28+
QUALITY OF SEED		0.00	0.00	0.00	0.00	0.00	0.00	-0.29+	-0.12	-0.13
								0.00	0.00	0.00

TABLE 106 EXPERIMENT 20 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
13	WILLIAMS	1.00	198.00	33.00	20.70	0.00	38.0	23.3
5	BOSSIER	1.00	198.50	33.10	17.98	0.00	39.7	22.1
14	CALLAND	1.00	198.50	39.95	19.20	0.00	37.7	21.6
7	DAVIS	1.00	192.50	39.45	17.70	0.00	39.2	22.0
4	IMPROVED PELICAN	1.00	189.50	47.15	14.83	0.00	40.2	23.1
1	JUPITER	1.00	186.00	44.45	20.13	0.00	40.7	22.0
6	BRAGG	1.00	192.50	35.20	21.33	0.00	39.4	22.6
11	CLARK 63	1.00	196.50	38.45	18.70	0.00	38.9	22.9
12	BONUS	1.00	198.00	34.15	18.55	0.00	40.5	22.8
3	HARDEE	1.00	188.75	36.05	17.55	0.00	40.1	22.5
15	AMERICAN	1.00	178.25	48.70	21.48	0.00	42.1	20.1
2	HAMPTON 266A	1.00	191.25	26.65	25.43	0.00	39.0	23.1
9	FORREST	1.00	173.25	35.05	14.70	0.00	38.6	22.7
10	HILL	1.00	177.00	33.70	17.58	0.00	38.4	21.5
8	TRACY	1.00	175.00	31.60	19.70	0.00	41.5	20.9
	GRAND MEAN	1.00	188.90	37.11	19.03	0.00	39.6	22.2
	STANDARD ERROR OF A VARIETY MEAN	0.00	6.96	3.15	0.62	0.00		
	COEFFICIENT OF VARIATION	0.00%	7.37%	16.96%	6.53%	0.00%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	*****	8.98	1.77	0.00		
C O R R E L A T I O N S								
			(+ - PROB=.05	++ - PROB=.01)				
YIELD	KG/HA	0.00	0.44++	0.32+	0.02	0.00		
DAYS TO	FLOWER	0.00	-0.14	0.23	-0.26+	0.00		
DAYS TO	MATURITY	0.00	-0.04	0.55++	0.09	0.00		
NODULE	NUMBER 1	0.00	-0.20	0.16	-0.15	0.00		
NODULE	NUMBER 2	0.00	-0.10	0.04	-0.21	0.00		
NODULE	WEIGHT 1	0.00	-0.11	0.10	-0.27+	0.00		
NODULE	WEIGHT 2	0.00	-0.30+	-0.04	-0.29+	0.00		
PLANT	HEIGHT	0.00	0.08	0.65++	-0.12	0.00		
	LODGING	0.00	-0.02	0.28+	-0.13	0.00		
	SHATTER	1.00	0.00	0.00	0.00	0.00		
PLANTS	HARVEST	0.00	1.00	0.06	0.04	0.00		
PODS PER	PLANT	0.00	0.06	1.00	-0.16	0.00		
100 SEED	WEIGHT	0.00	0.04	-0.16	1.00	0.00		
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00		

TABLE 107

EXPERIMENT 67

YEAR 1974

REGION - SOUTH AMERICA
 SITE - EBINI
 LATITUDE - 5 DEG. 33 MIN. N
 DATE PLANTED - JUNE 11, 1974
 SOIL TYPE - SANDY LOAM
 FERTILIZER USED (KG/HA) - P 35.0, K 66.0
 LOCAL VARIETIES - F67-1533 X JUPITER

COUNTRY - GUYANA
 COOPERATOR - C. NWASIKE
 DATE HARVESTED - SEPTEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	* NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
15	F67-1533 X JUPITER	1951.64	39.00	118.00	169.25	135.75	0.75		1.20	40.43	2.00
1	JUPITER	1734.51	36.00	114.00	125.00	119.75	0.47		1.08	55.65	2.00
4	IMPROVED PELICAN	1550.31	38.50	102.00	127.50	91.50	0.70		0.88	52.68	2.00
12	BONUS	1063.13	27.00	77.75	237.25	82.50	0.60		0.82	38.63	2.00
9	FORREST	1033.12	29.00	80.50	155.25	148.25	0.70		1.23	29.15	2.00
5	BOSSIER	1004.78	36.50	91.00	228.50	189.75	0.72		1.18	36.25	2.00
7	DAVIS	956.44	31.25	87.25	236.75	159.50	1.08		1.50	21.55	2.00
6	BRAGG	926.85	29.00	80.75	199.75	171.25	0.83		1.45	29.98	2.00
10	HILL	921.02	33.00	76.00	155.25	131.50	0.60		1.40	27.28	2.00
14	CALLAND	779.32	26.50	75.50	114.00	101.75	0.83		1.73	37.25	2.00
2	HAMPTON 266A	765.57	29.25	81.00	133.50	130.25	0.63		1.15	25.08	2.25
11	CLARK 63	723.06	28.00	75.75	130.00	86.75	0.70		1.35	40.28	2.00
3	HARDEE	681.39	33.50	89.00	123.50	110.50	0.65		1.08	25.00	2.00
13	WILLIAMS	596.37	28.00	77.50	134.25	116.25	0.65		1.33	38.30	2.00
8	TRACY	483.85	27.50	76.00	151.00	89.25	0.85		1.13	25.00	2.00
GRAND MEAN											
STANDARD ERROR OF A VARIETY MEAN											
COEFFICIENT OF VARIATION											
5% LSD VARIETY MEANS (*****=NS)											
C O R R E L A T I O N S											
(+ - PROB=-.05 +- - PROB=.01)											
YIELD	KG/HA	1.00	0.51++	0.57++	0.31+	0.38++	0.21	0.30+	0.62++	-0.09	
DAYS TO FLOWER		0.51++	1.00	0.83++	0.02	0.12	-0.08	-0.12	0.39++	-0.08	
DAYS TO MATURITY		0.57++	0.83++	1.00	-0.05	0.07	-0.11	-0.10	0.51++	-0.06	
NODULE NUMBER 1		0.31+	0.02	-0.05	1.00	0.46++	0.64++	0.44++	0.01	-0.06	
NODULE NUMBER 2		0.38++	0.12	0.07	0.46++	1.00	0.32+	0.81++	-0.00	0.04	
NODULE WEIGHT 1		0.21	-0.08	-0.11	0.64++	0.32+	1.00	0.41++	-0.06	0.03	
NODULE WEIGHT 2		0.30+	-0.12	-0.10	0.44++	0.81++	0.41++	1.00	0.04	-0.01	
PLANT HEIGHT		0.62++	0.39++	0.51++	0.01	-0.00	-0.06	0.04	1.00	-0.13	
LODGING		-0.09	-0.08	-0.06	-0.06	0.04	0.03	-0.01	-0.13	1.00	
SHATTER		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PLANTS HARVEST		0.34++	-0.32+	-0.39++	0.42++	0.25	0.39++	0.34++	0.08	-0.04	
PODS PER PLANT		0.55++	0.65++	0.73++	-0.10	0.01	-0.07	-0.04	0.60++	-0.04	
100 SEED WEIGHT		0.26+	-0.10	0.29+	0.01	-0.01	-0.07	0.10	0.35++	0.03	
QUALITY OF SEED		-0.62++	-0.77++	-0.87++	0.09	0.00	0.16	0.08	-0.63++	0.06	

TABLE 107 EXPERIMENT 67 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
15	F67-1533 X JUPITER	0.00	53.00	37.87	19.08	1.00	41.0	23.1
1	JUPITER	0.00	111.50	44.20	21.08	1.00	38.6	24.7
4	IMPROVED PELICAN	0.00	101.00	41.32	13.00	2.00	39.9	23.4
12	BONUS	0.00	154.25	17.95	19.00	4.00	41.0	23.3
9	FORREST	0.00	152.00	22.70	12.65	4.00	40.1	23.1
5	BOSSIER	0.00	118.00	23.75	14.45	4.00	39.1	23.2
7	DAVIS	0.00	129.00	19.95	16.55	4.00	40.5	22.9
6	BRAGG	0.00	121.00	19.65	16.23	4.00	39.7	23.0
10	HILL	0.00	137.50	20.63	14.05	3.00	39.8	22.3
14	CALLAND	0.00	140.00	16.33	17.20	4.00	40.3	22.4
2	HAMPTON 266A	0.00	108.00	18.03	17.10	4.00	38.4	24.5
11	CLARK 63	0.00	117.25	21.00	16.08	4.00	40.7	22.9
3	HARDEE	0.00	85.25	24.42	14.58	4.00	39.7	23.8
13	WILLIAMS	0.00	104.25	22.80	18.93	4.00	40.5	23.6
8	TRACY	0.00	117.50	20.80	16.90	5.00	42.3	20.9
	GRAND MEAN	0.00	116.63	24.76	16.46	3.47	40.1	23.1
	STANDARD ERROR OF A VARIETY MEAN	0.00	25.34	3.60	0.61	0.00		
	COEFFICIENT OF VARIATION	0.00%	43.46%	29.09%	7.47%	0.00%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	*****	10.28	1.75	0.00		
C O R R E L A T I O N S								
	YIELD	0.00	0.34++	0.55++	0.26+	-0.62++		
	KG/HA	0.00	-0.32+	0.65++	-0.10	-0.77++		
	DAYS TO FLOWER	0.00	-0.39++	0.73++	0.29+	-0.87++		
	DAYS TO MATURITY	0.00	0.42++	-0.10	0.01	0.09		
	NODULE NUMBER 1	0.00	0.25	0.01	-0.01	0.00		
	NODULE NUMBER 2	0.00	0.39++	-0.07	-0.07	0.16		
	NODULE WEIGHT 1	0.00	0.34++	-0.04	0.10	0.08		
	NODULE WEIGHT 2	0.00	0.08	0.60++	0.35++	-0.63++		
	PLANT HEIGHT	0.00	-0.04	-0.04	0.03	0.06		
	LOGGING	0.00	0.00	0.00	0.00	0.00		
	SHATTER	1.00	1.00	-0.13	-0.09	0.26+		
	PLANTS HARVEST	0.00	-0.13	1.00	0.16	-0.72++		
	PODS PER PLANT	0.00	-0.09	0.16	1.00	-0.27+		
	100 SEED WEIGHT	0.00	0.26+	-0.72++	-0.27+	1.00		
	QUALITY OF SEED	0.00						

TABLE 108 EXPERIMENT 68 YEAR 1974

REGION - SOUTH AMERICA
 SITE - MON REPOS
 LATITUDE - 6 DEG. 46 MIN. N
 DATE PLANTED - MAY 28, 1974
 SOIL TYPE - SAND
 FERTILIZER USED (KG/HA) - P 35.0, K 66.0
 LOCAL VARIETIES - F67-1533 X JUPITER

COUNTRY - GUYANA
 COOPERATOR - C. NWAISIKE

DATE HARVESTED - SEPTEMBER, 1974

ENTRY NUMBER	VARIETY OR CROSS	YIELD KG/HA	DAYS TO FLOWER	DAYS TO MATURITY	NODULE NUMBER 1	NODULE NUMBER 2	NODULE WEIGHT 1	NODULE WEIGHT 2	PLANT HEIGHT	LODGING
14	F67-1533 X JUPITER ROW 9	4139.87	47.00	124.25	275.00	434.75	1.50	6.03	56.75	1.00
15	F67-1533 X JUPITER ROW 1	3878.86	48.50	123.25	284.25	489.00	2.10	5.82	52.25	1.00
1	JUPITER	3676.28	39.25	119.50	321.75	503.75	1.88	6.20	63.00	1.00
7	DAVIS	3019.52	33.75	97.25	285.50	480.00	3.00	5.00	38.00	1.00
3	HARDEE	2897.00	35.75	99.75	273.50	417.25	2.38	6.05	32.00	1.00
5	BOSSIER	2881.45	35.50	95.75	394.75	402.00	3.03	5.50	45.75	1.25
2	HAMPTON 266A	2602.23	30.00	95.75	254.50	301.00	2.00	4.53	36.50	1.00
6	BRAGG	2546.88	30.25	96.00	340.75	500.00	2.58	5.08	34.00	1.00
4	IMPROVED PELICAN	2531.05	39.00	106.25	208.50	535.00	1.73	8.05	76.75	1.75
9	FORREST	2248.37	30.25	93.00	310.75	454.00	2.28	4.58	35.50	1.00
10	HILL	2054.20	34.00	88.00	230.50	193.00	1.63	2.78	32.00	1.00
11	CLARK 63	1811.90	29.50	93.00	294.00	270.50	2.20	5.02	41.25	1.00
13	WILLIAMS	1791.52	30.50	90.50	306.75	310.00	2.83	4.15	42.25	1.00
8	TRACY	1503.34	29.00	85.50	297.00	214.75	3.13	2.43	33.75	1.00
12	BONUS	1307.80	28.75	90.50	278.00	132.75	2.53	2.00	40.25	1.00
GRAND MEAN		2592.69	34.73	99.82	290.37	375.85	2.32	4.88	44.00	1.07
STANDARD ERROR OF A VARIETY MEAN		276.39	0.47	1.35	33.95	82.38	0.36	0.96	3.13	0.09
COEFFICIENT OF VARIATION		21.32%	2.71%	2.70%	23.38%	43.84%	31.02%	39.29%	14.23%	16.91%
5% LSD VARIETY MEANS (*****=NS)		788.84	1.34	3.85	*****	235.13	1.03	2.74	8.94	0.26
C O R R E L A T I O N S										
(+ - PROB=.05 ++ - PROB=.01)										
YIELD	KG/HA	1.00	0.74++	0.78++	-0.00	0.35++	0.03	0.29+	0.45++	-0.03
DAYS TO FLOWER	0.74++	1.00	1.00	0.89++	-0.08	0.33++	-0.28+	0.35++	0.57++	0.14
DAYS TO MATURITY	0.78++	0.89++	1.00	1.00	-0.04	0.40++	-0.19	0.36++	0.62++	0.09
NODULE NUMBER 1	-0.00	-0.00	-0.08	1.00	1.00	0.07	0.40++	0.07	-0.04	-0.08
NODULE NUMBER 2	0.35++	0.33++	0.40++	0.07	0.07	1.00	-0.18	0.80++	0.24	-0.04
NODULE WEIGHT 1	0.03	-0.28+	-0.19	0.40++	0.07	-0.18	1.00	-0.26+	-0.11	0.06
NODULE WEIGHT 2	0.29+	0.35++	0.36++	0.07	0.80++	0.80++	-0.26+	1.00	0.34++	0.05
PLANT HEIGHT	0.45++	0.57++	0.57++	0.62++	-0.04	0.24	-0.11	0.34++	1.00	0.54++
LODGING	-0.03	0.14	0.09	-0.08	-0.04	-0.04	0.06	0.05	0.54++	1.00
SHATTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANTS HARVEST	-0.27+	-0.64++	-0.58++	0.04	-0.27+	0.34++	-0.22	-0.27+	-0.27+	0.02
PODS PER PLANT	0.65++	0.81++	0.81++	0.09	0.42++	0.42++	-0.16	0.38++	0.50++	0.16
100 SEED WEIGHT	-0.03	-0.32+	-0.06	0.02	-0.24	-0.24	0.30+	-0.26+	-0.15	-0.37++
QUALITY OF SEED	-0.68++	-0.63++	-0.57++	0.03	-0.44++	-0.44++	0.27+	-0.44++	-0.38++	-0.17

TABLE 108 EXPERIMENT 68 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
14	F67-1533 X JUPITER ROW 9	1.00	90.00	68.00	19.75	1.00	39.2	23.7
15	F67-1533 X JUPITER ROW 1	1.00	93.50	64.00	19.50	1.00	40.2	23.5
1	JUPITER	1.00	179.25	49.25	22.80	1.00	39.6	23.4
7	DAVIS	1.00	192.75	27.75	21.38	1.75	38.7	23.0
3	HARDEE	1.00	185.00	28.25	18.88	1.00	40.0	23.2
5	BOSSIER	1.00	196.75	37.25	17.93	1.50	41.3	22.6
2	HAMPTON 266A	1.00	185.75	25.50	22.55	1.50	39.7	23.9
6	BRAGG	1.00	174.50	31.25	21.68	2.00	41.7	22.0
4	IMPROVED PELICAN	1.00	167.50	39.00	16.68	1.00	43.3	21.6
9	FORREST	1.00	176.25	30.50	16.65	2.00	40.1	22.2
10	HILL	1.00	200.00	20.75	18.93	2.25	39.9	22.1
11	CLARK 63	1.00	185.50	16.00	22.03	3.50	42.6	21.4
13	WILLIAMS	1.00	170.75	16.75	23.30	2.75	43.6	21.5
8	TRACY	1.00	161.75	21.75	21.30	2.75	40.7	21.5
12	BONUS	1.00	189.50	24.50	22.43	4.00	39.4	23.3
GRAND MEAN								
STANDARD ERROR OF A VARIETY MEAN		1.00	169.92	33.37	20.38	1.93	40.7	22.6
COEFFICIENT OF VARIATION		0.00	10.51	4.48	0.52	0.24		
5% LSD VARIETY MEANS (*****=NS)		0.00%	12.37%	26.86%	5.11%	25.07%		
		0.00	29.99	12.79	1.49	0.69		
C O R R E L A T I O N S (+ - PROB=.05 ++ - PROB=.01)								
YIELD	KG/HA	0.00	-0.27+	0.65++	-0.03	-0.68++		
DAYS TO FLOWER		0.00	-0.64++	0.81++	-0.32+	-0.63++		
DAYS TO MATURITY		0.00	-0.58++	0.81++	-0.06	-0.57++		
NODULE NUMBER 1		0.00	0.04	0.09	0.02	0.03		
NODULE NUMBER 2		0.00	-0.27+	0.42++	-0.24	-0.44++		
NODULE WEIGHT 1		0.00	0.34++	-0.16	0.30+	0.27+		
NODULE WEIGHT 2		0.00	-0.22	0.38++	-0.26+	-0.44++		
PLANT HEIGHT		0.00	-0.27+	0.50++	-0.15	-0.38++		
LODGING		0.00	0.02	0.16	-0.37++	-0.17		
SHATTER		1.00	0.00	0.00	0.00	0.00		
PLANTS HARVEST		0.00	1.00	-0.68++	0.18	0.31+		
PODS PER PLANT		0.00	-0.68++	1.00	-0.23	-0.51++		
100 SEED WEIGHT		0.00	0.18	-0.23	1.00	0.40++		
QUALITY OF SEED		0.00	0.31+	-0.51++	0.40++	1.00		

TABLE 109 EXPERIMENT 15 YEAR 1974 (CONTINUED)

ENTRY NUMBER	VARIETY OR CROSS	SHATTER	PLANTS HARVEST	PODS PER PLANT	100 SEED WEIGHT	QUALITY OF SEED	PROTEIN PERCENT	OIL PERCENT
1	JUPITER	1.00	197.50	63.50	17.50	2.00	43.6	23.5
5	BOSSIER	1.00	245.00	58.50	17.25	2.00	42.6	25.2
4	IMPROVED PELICAN	1.00	221.25	64.25	15.00	2.00	43.6	24.2
14	CALLAND	1.00	230.00	38.25	18.25	2.00	41.3	22.8
7	DAVIS	1.00	151.00	70.00	19.50	2.00	44.7	21.6
12	BONUS	1.00	220.75	57.25	15.25	2.00	46.0	22.6
15	SEMMES	1.00	124.50	42.50	15.50	2.00	42.6	24.0
6	BRAGG	1.00	210.75	47.75	14.25	2.00	46.0	20.2
11	CLARK 63	1.00	266.75	49.50	15.00	2.00	40.0	24.5
9	FORREST	1.00	95.00	58.25	16.75	2.00	42.6	24.0
13	WILLIAMS	1.00	236.75	37.50	18.25	2.00	38.7	26.0
8	TRACY	1.00	191.25	56.50	15.25	2.00	45.6	21.0
2	HAMPTON 266A	1.00	146.25	46.50	20.75	2.00	43.0	23.7
10	HILL	1.00	39.50	63.25	19.25	2.00	42.2	22.7
3	HARDEE	1.00	9.50	81.50	21.50	2.00	44.6	23.0
	GRAND MEAN	1.00	172.38	55.67	17.28	2.00	43.1	21.9
	STANDARD ERROR OF A VARIETY MEAN	0.00	21.24	6.16	0.27	0.00		
	COEFFICIENT OF VARIATION	0.00%	24.64%	22.14%	3.18%	0.00%		
	5% LSD VARIETY MEANS (*****=NS)	0.00	60.62	17.59	0.78	0.00		
C O R R E L A T I O N S								
			(+ - PROB=.05	++ - PROB=.01)				
YIELD	KG/HA	0.00	0.46++	0.18	-0.36++	0.00		
DAYS TO FLOWER		0.00	-0.13	0.52++	0.10	0.00		
DAYS TO MATURITY		0.00	-0.15	0.45++	0.22	0.00		
NODULE NUMBER 1		0.00	0.00	0.00	0.00	0.00		
NODULE NUMBER 2		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 1		0.00	0.00	0.00	0.00	0.00		
NODULE WEIGHT 2		0.00	0.00	0.00	0.00	0.00		
PLANT		0.00	0.00	0.00	0.00	0.00		
LODGING	HEIGHT	0.00	0.39++	0.12	-0.30+	0.00		
SHATTER		0.00	0.29+	0.13	-0.20	0.00		
PLANTS	HARVEST	0.00	1.00	-0.33++	-0.52++	0.00		
PODS PER	PLANT	0.00	-0.33++	1.00	0.20	0.00		
100 SEED	WEIGHT	0.00	-0.52++	0.20	1.00	0.00		
QUALITY	OF SEED	0.00	0.00	0.00	0.00	1.00		

